SONY KV1412AS/F/E

MODEL

SERVICE MANUAL

KV-1412EG
RM-635

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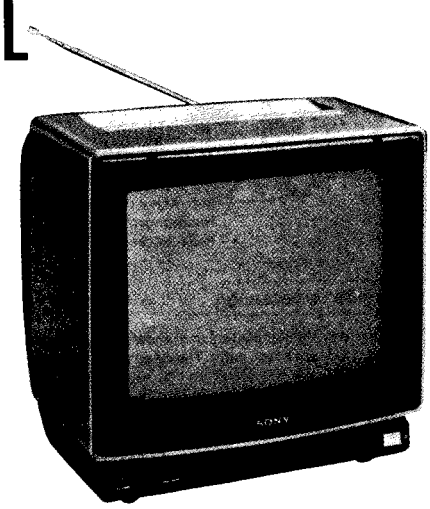
Germany Model
Chassis No. SCC-543A-A



XE-3 CHASSIS

December, 1983

SPECIFICATIONS

KV-1412EG

Television system	CCIR TV standards (system B, G and H)
Color system	PAL
Channel coverage	VHF channels E2 - U20 (45 - 300 MHz) UHF channels E21 - E68
Programing system	30 programs Automatic programing digital tuning
Picture tube	36.8 cm, 90-degree deflection Trinitron system (33.7 cm screen measured diagonally)
Antenna	VHF/UHF telescopic antenna 75-ohm external antenna socket for VHF/UHF (DIN 45325/IEC 169-2)
Speaker	9 × 5 cm
Audio output	1.3 W
Power requirements	220 V ac, 50 Hz
Power consumption	70 W (IEC) 11.5 W (in stand-by condition)
Dimensions	Approx. 364 × 354 × 427 mm (w/h/d)
Weight	Approx. 12.5 kg
Accessories supplied	Earphone ME-20B Remote Commander RM-635

MICROFILM

TRINITRON® COLOR TV

SONY®

CTV

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WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

WARNUNG !!

UM ELEKTRISCHE SCHLÄGE ZU VERMEIDEN, SOWIE MESSGERÄTE BEI REPARATUREN VOR ZERSTÖRUNG ZU SCHÜTZEN, DARF DAS GERÄT BEI ABGENOMMENER RÜCKWAND NUR ÜBER EINEN ENTSPRECHEND DIMENSIONIERTEN TRENNTRANSFORMATOR BETRIEBEN WERDEN.

SICHERHEITSHINWEIS FÜR KOMPONENTEN !!

DIE IN DEN SCHALTBILDERN, DEN IN EINZELTEILE AUFGELÖSTEN PERSPEKTIVISCHEN ZEICHNUNGEN UND DEN TEILELISTEN SCHRAFFIERT EINGEZEICHNETE UND DURCH DAS ZEICHEN ⚠ GEKENNZEICHNETE KOMPONENTEN SIND FÜR DIE BETRIEBSSICHERHEIT KRITISCH. DIESE KOMPONENTEN SIND DURCH SOLCHE SONY TEILE ZU ERSETZEN, DEREN TEILENUMMERN IN DIESEM HANDBUCH ODER IN VON SONY HERAUSGEGEBENEN ERGÄNZUNGEN ANGEGEBEN SIND.
AUF FÜR DIE BETRIEBSSICHERHEIT KRITISCHE SCHALTUNGSEINSTELLUNGEN WIRD IN DIESEM HANDBUCH HINGEWIESEN.
BEFOLGEN SIE DIESE ANWEISUNGEN STETS, WENN KRITISCHE KOMPONENTEN AUSGEWECHSELT WERDEN ODER VERDACHT AUF FUNKTIONSSTÖRUNGEN BESTEHT.

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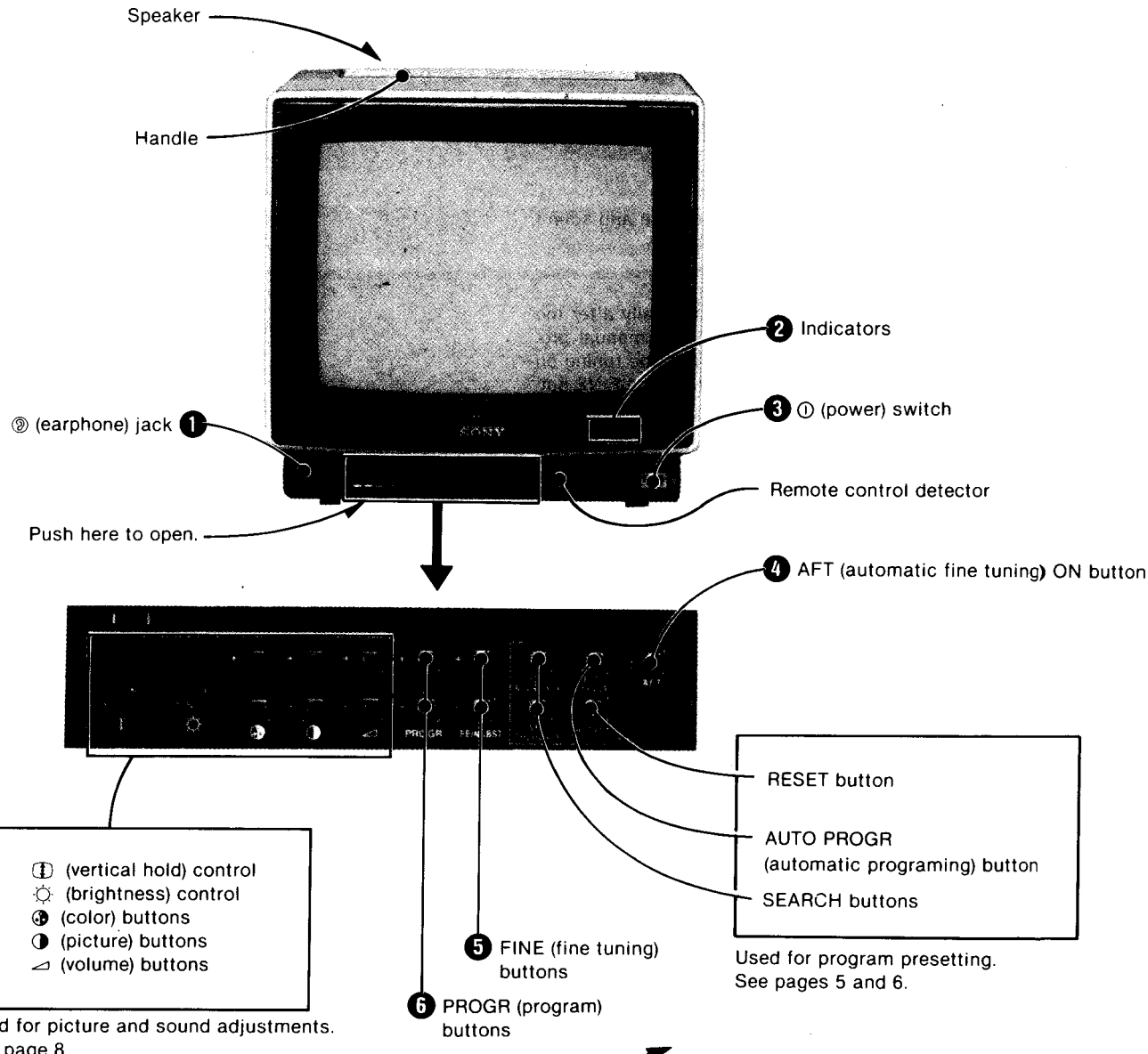
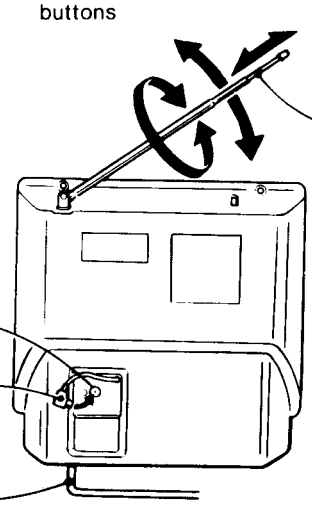
SECTION 1
GENERAL

1-1. LOCATION AND FUNCTION OF CONTROLS

On the front panel



On the rear panel


Telescopic antenna
For optimum VHF and UHF reception, use this antenna. Adjust the length, direction and angle for the best possible picture.
VHF/UHF antenna socket
Connect the telescopic antenna plug here. If you prefer to use an external antenna, connect it here.
Telescopic antenna plug
Plug into the VHF/UHF antenna socket.
AC power cord
Connect to a 220 V wall outlet.

❶ ⓟ (earphone) jack
For private listening, insert the supplied earphone plug into the jack. This disconnects the loudspeaker. Adjust the TV volume to a proper listening level.

❷ Indicators
⏻ (standby) indicator (red)
Lights up when the TV is turned off with the Remote Commander. When any of the buttons on the Remote Commander is pressed, this indicator blinks.
AFT ON (automatic fine tuning) indicator (red)
Lights up when the automatic fine tuning circuit activates.

❸ ⏻ (power) switch
Press to turn on the TV. Press again to turn it off.
When the TV is turned off with this switch, the picture and sound settings will be memorized.

❹ AFT (automatic fine tuning) ON button
The automatic fine tuning circuit activates automatically after the stations are tuned and memorized in automatic and manual programing. In case you want to restore the automatic fine tuning on the channel which has been fine-tuned manually with the FINE buttons, press the AFT ON button.

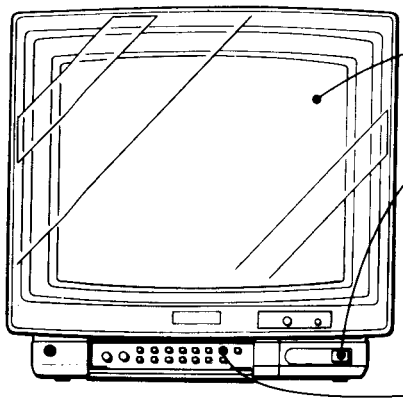
❺ FINE (fine tuning) buttons
Keep either + or − depressed to get a clear picture for each unsatisfactory channel. The automatic fine tuning circuit will be automatically deactivated on the channel fine-tuned with these buttons.

❻ PROGR (program) buttons
Press either + or − to select a preset program from positions 1 through 30. The selected program number will appear on the screen. Note that program 30 is "0" on the screen. Press + for higher-numbered programs, and − for lower-numbered programs. Programs will be changed continuously in a sequence. If there is annoying noise at an unused program position, eliminate it by pressing the RESET button.

1-2. PROGRAM PRESETTING

This TV has 30 program positions. Once you preset the programs broadcast in your area, program selection is simply made by pressing the + or – PROGR button on the TV or the hand-held Remote Commander.
Preset programs by following one of these procedures ; automatic programing or manual programing.

AUTOMATIC PROGRAMING



The program number will be indicated here.

1 **Depress ⏻ to turn on the TV.**

2 **Press AUTO PROGR button.**
Automatic programing will begin.
The first channel found will be memorized on program position 1, the second on position 2, and so on.

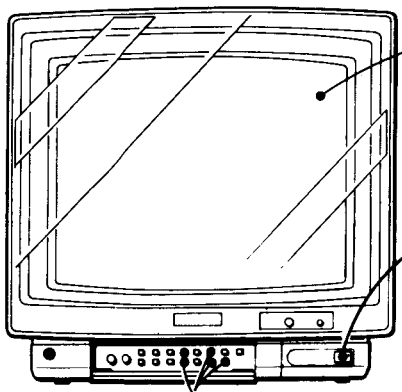
This tuning-memorizing sequence will be repeated for each channel in your area.
When no more channels can be found, automatic programing will stop, and the program preset on the first program position will appear on the TV screen.
The number "1" will light (not blink) on the TV screen.

After presetting has been completed, press the PROGR buttons to check the results of the automatic programing, referring to your local TV listings.

MANUAL PROGRAMING

With the manual program search system, the channels you want can be preset in a desired sequence.
Any channel can be set to any program position. Consult your local TV listings to find out the active channels in your area.
Make a list of your desired VHF and UHF channels and arrange them in a desired sequence.

RESET button
If this button is pressed, the set will be automatically tuned to a frequency below channel E2.
If you want to skip a particular program position when scanning with the PROGR buttons on the Remote Commander, press the RESET button when the indicator shows that position.



The program number will be indicated here.

1 **Depress ⏻ to turn on the TV.**

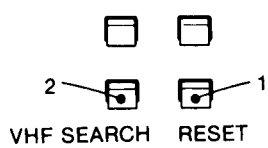
2 **Press the + or – PROGR button to select the number of the program position to which the channel is to be preset.**

For higher-numbered program position

For lower-numbered program position

3 **Press the RESET button and then the VHF SEARCH or UHF SEARCH button.**
The first channel found will be tuned. Every time you press the SEARCH button, a higher-numbered channel is located, so press the button until the desired station received.

to locate a VHF channel E2 - U20



to locate a UHF channel E21 - E68

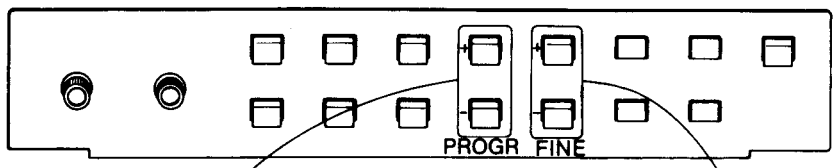
When the channel is tuned in and memorized, the program number stops blinking.

● In strong signal areas, tuning may sometimes stop between channels. If this happens, just press the SEARCH button again.

Repeat steps 2 and 3 for all the desired channels.

FINE TUNING OF A WEAK STATION

If you cannot obtain a clear picture on a particular channel, fine-tune that station manually with the FINE buttons.



1 Select the program to be fine-tuned with the PROGR buttons.

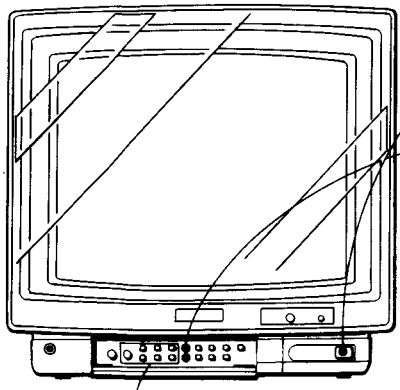
2 Keep the + or – FINE button pressed until a clear picture is obtained.

When either of the FINE buttons is pressed, the automatic fine tuning on the selected channel is deactivated and the AFT ON indicator turns off. To view the fine-tuned station, keep the automatic fine tuning deactivated (do not press the AFT ON button). When other memorized stations are selected, the automatic fine tuning activates automatically.

In case you want to restore the AFT on the channel which has been fine-tuned manually with the FINE buttons, press the AFT ON button. The AFT ON indicator will light.

1-3. BASIC OPERATION ON THE PANEL

INITIAL ADJUSTMENTS



1 **Depress the ⏻ switch.**

2 **Select the desired TV program.**

for higher-numbered programs — +

for lower-numbered programs — −

PROGR

The selected program number will appear on the screen.
To extinguish the program number, press the ⊡+ button on the Remote Commander.
Then, each time you press the PROGR button to change the program, the indications on the screen will disappear in a few seconds.

3 **Adjust the picture and sound.**

for less brightness — for more brightness

+ — for more color

for less color — −

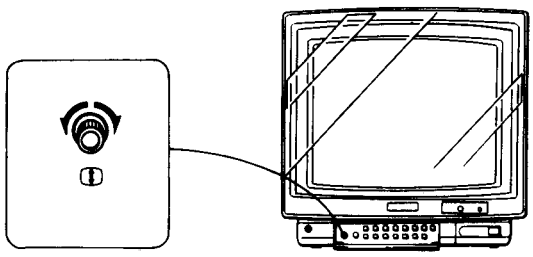
+ — to increase the picture contrast

to decrease the picture contrast — −

+ — to increase the volume

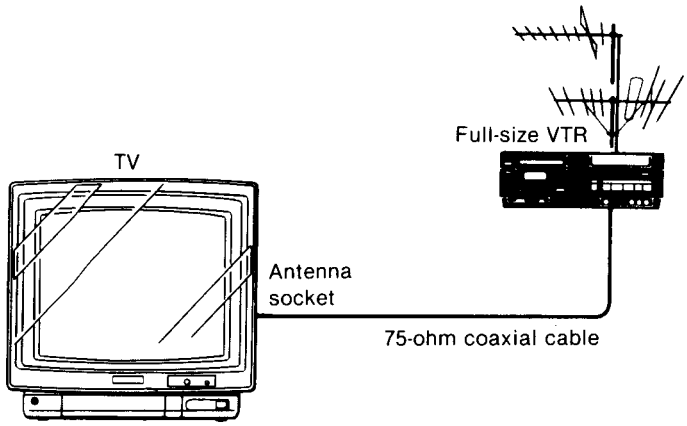
to decrease the volume — −

If picture rolls vertically
Adjust the ⫿ control.



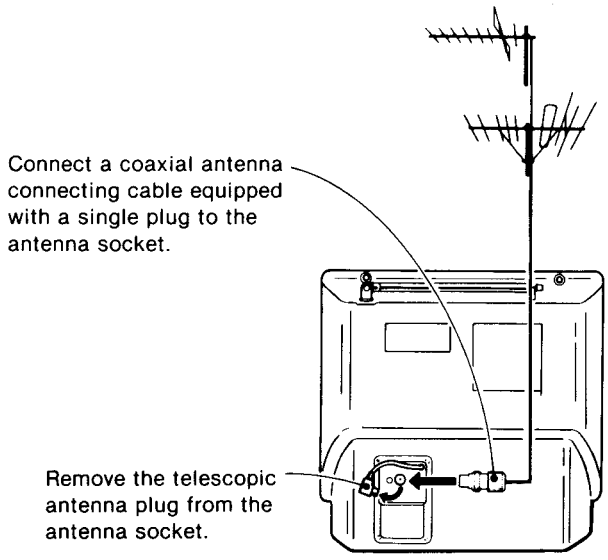
1-4. TO ENJOY VIDEO TAPE PLAYBACK USING THE ANTENNA SOCKET

You can connect a full-size VTR to the antenna socket on the TV's back panel. In this case, connect the outdoor antenna to the VTR. For details on the connections, see the instructions of the VTR.



1-5. EXTERNAL ANTENNA CONNECTION

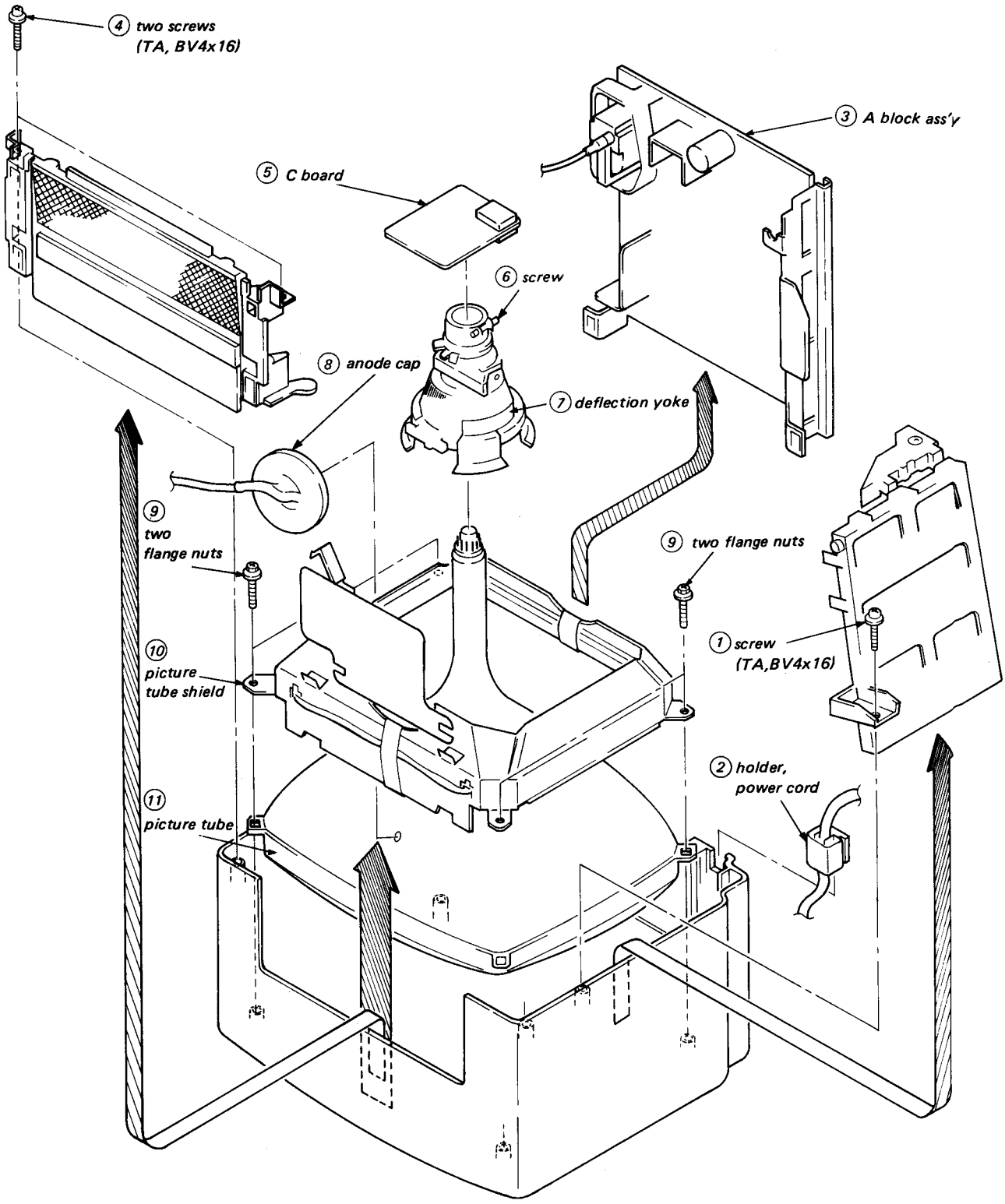
The built-in telescopic antenna will provide good reception in most reception areas. If you cannot obtain satisfactory reception with it, the use of an outdoor antenna is recommended.


Connect a coaxial antenna connecting cable equipped with a single plug to the antenna socket.
Remove the telescopic antenna plug from the antenna socket.

Your Sony dealer will be pleased to advise you which type of antenna is best suited to your location.

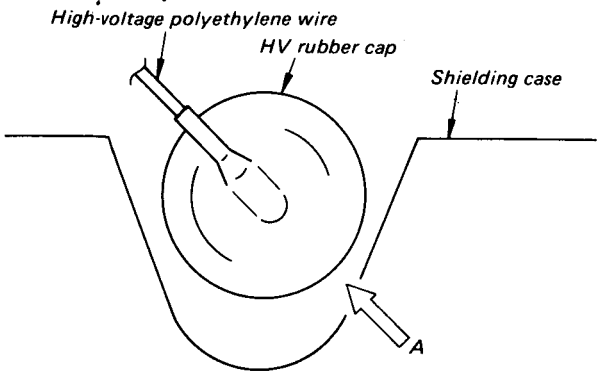
SECTION 2
DISASSEMBLY

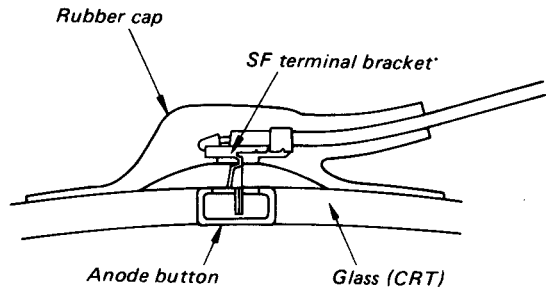
2-1. PICTURE TUBE REMOVAL

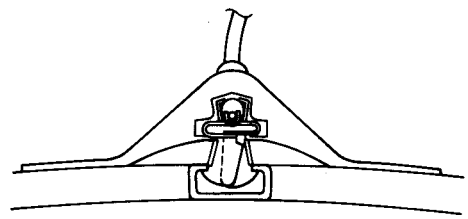


2-2. REMOVAL OF ANODE CAP

- **Anode Cap Structure**

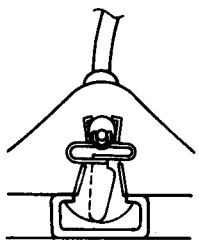




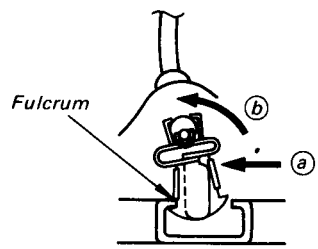


Cross section viewed from the arrow A

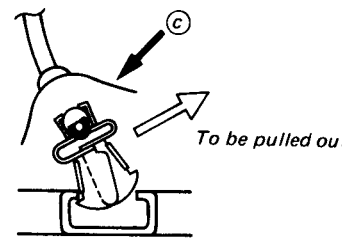
- **Removal of SF Terminal**



Normal inserting position

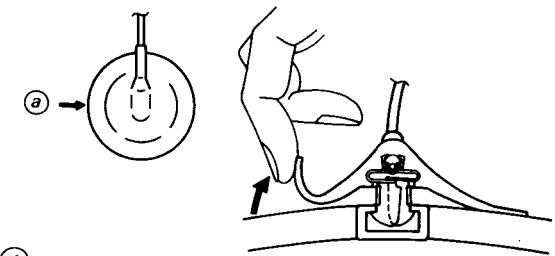


When pushing in the direction indicated by the arrow ⓐ, the SF terminal tilts toward the fulcrum side due to the spring characteristic.
Remove it by pulling up in the direction indicated by the arrow ⓑ with the SF terminal tilted.

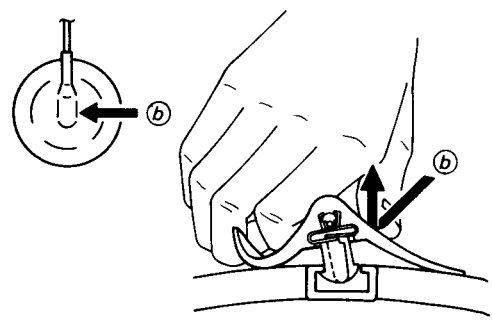


Tilt the SF terminal in the direction of the arrow ⓒ and pull out it in the direction (of 45°) indicated by the arrow.

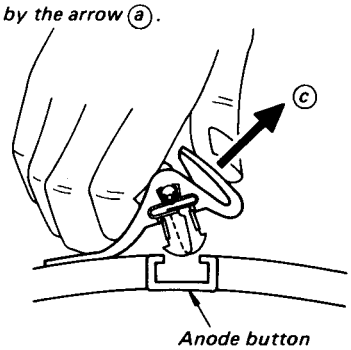
- **Removing Procedures**



① *Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.*



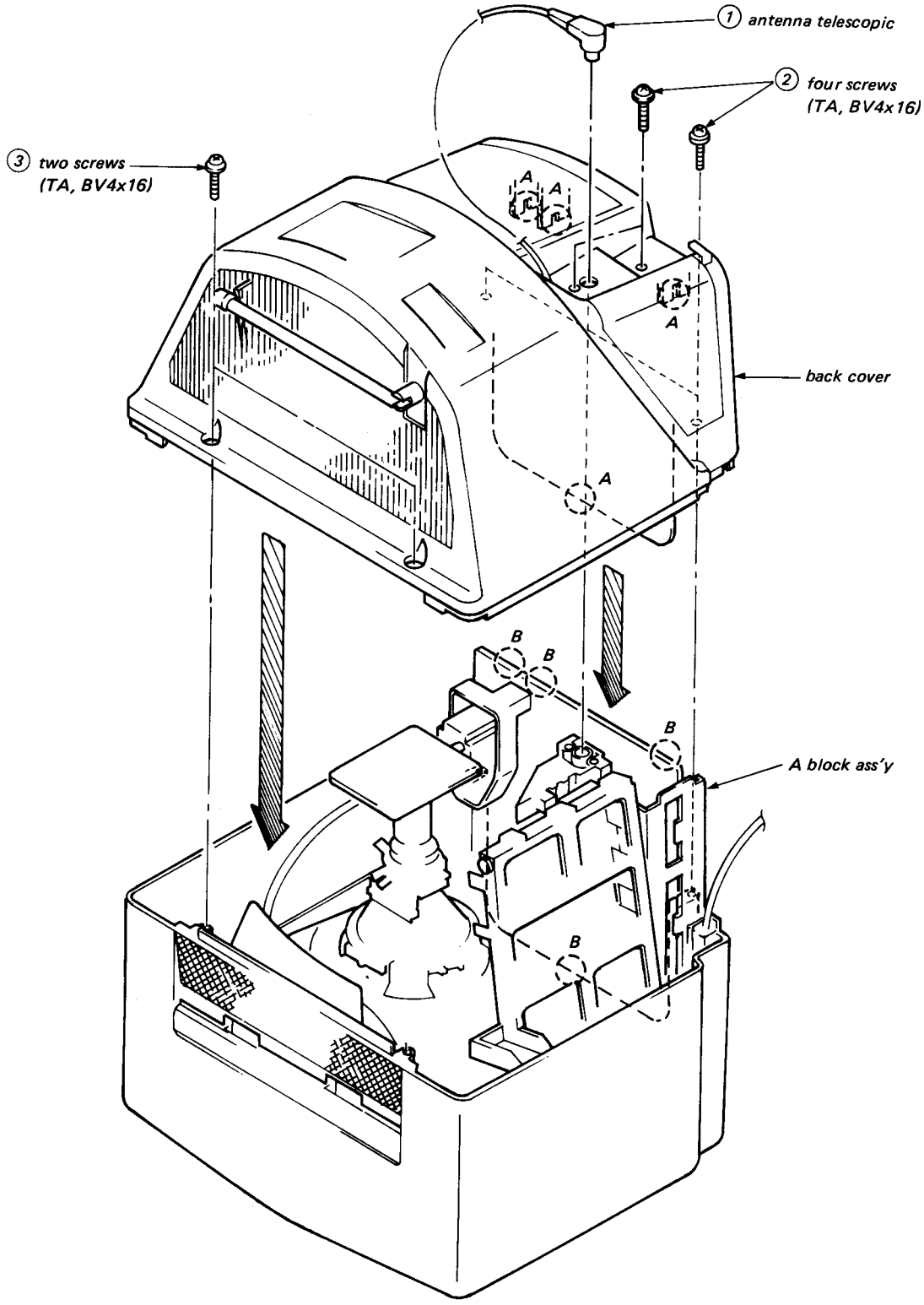
② *Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.*



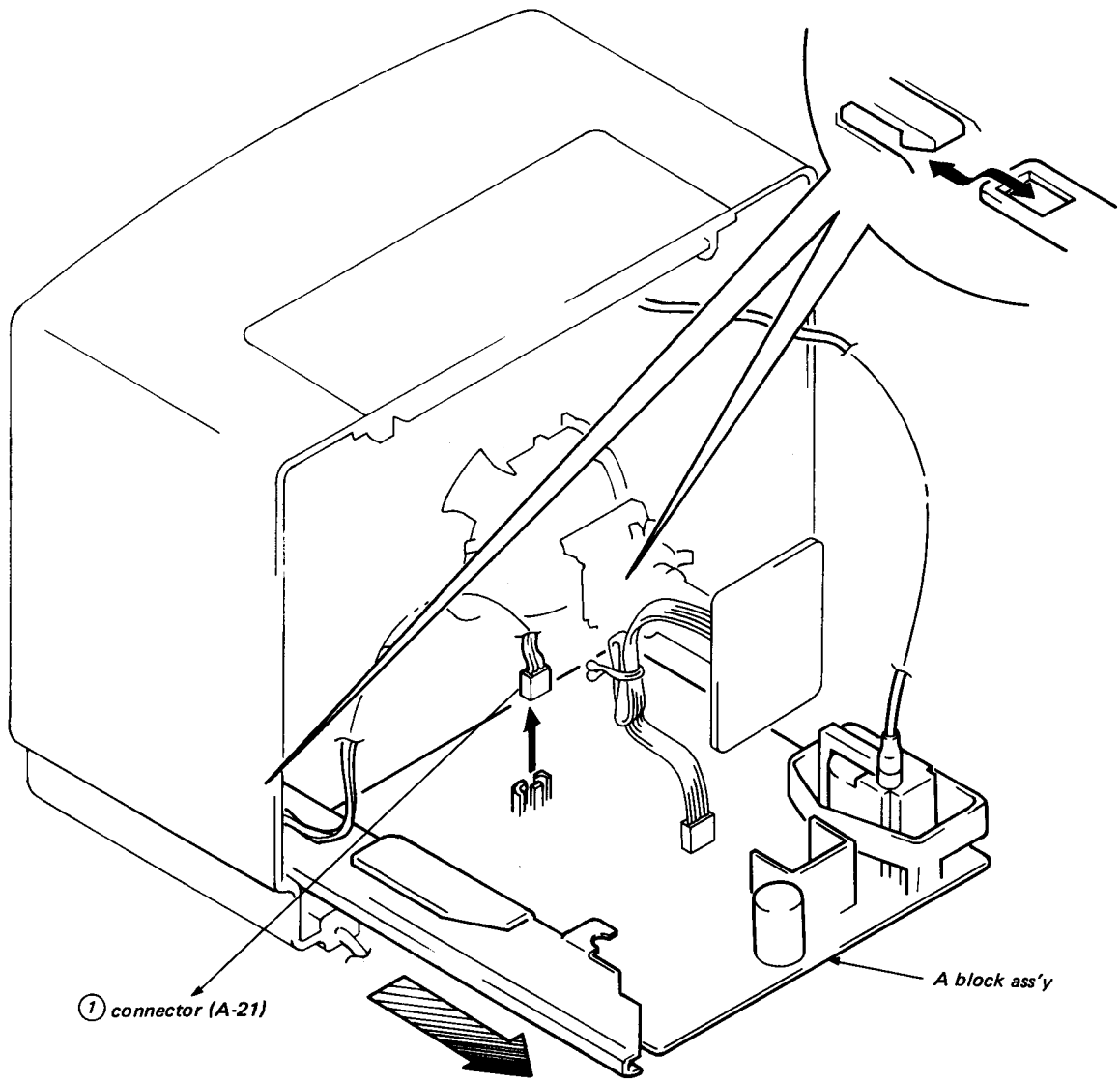
③ *When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.*

2-3. INSTALLATION OF BACK COVER

Note: Insert each section A of the back cover into the section B of the A block ass'y.



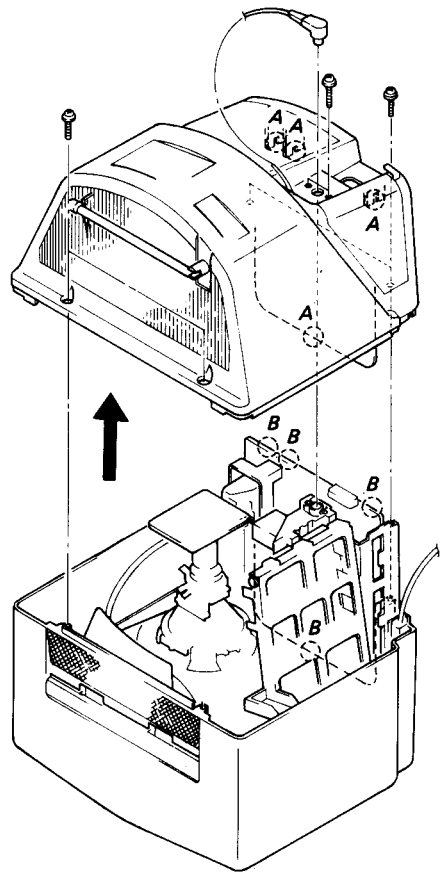
2-4. A BLOCK ASSEMBLY REMOVAL



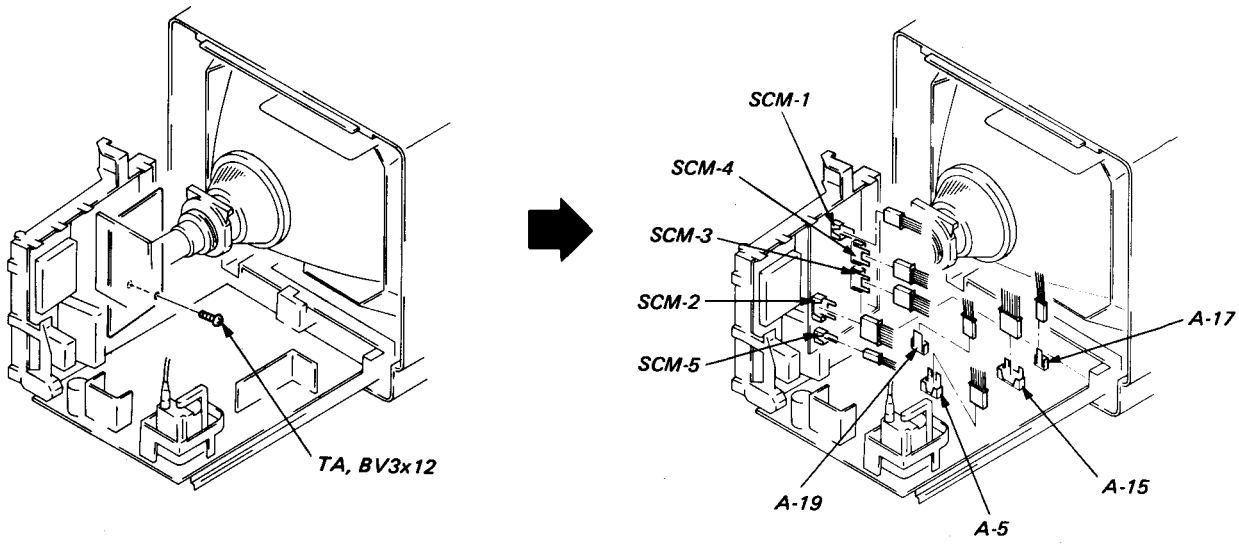
2-5. OPK-102 BOARD ATTACHING

Before installing OPK-102 unplug the set from the wall outlet.
After the installation is completes. check that the TV operates properly.

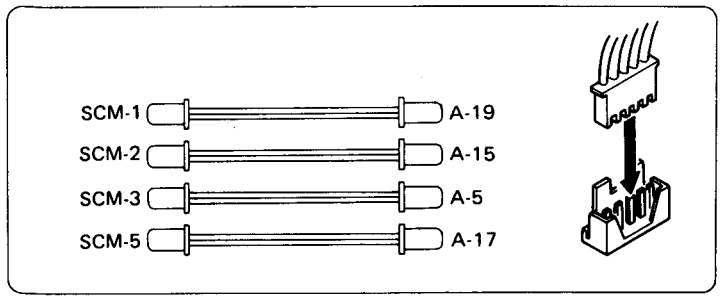
1. Remove the back cover.



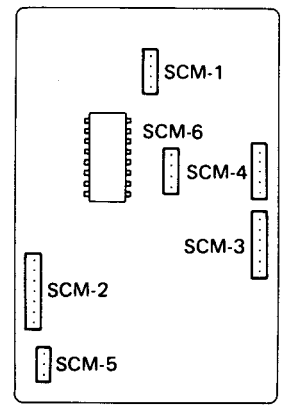
2. OPK-102 BOARD MOUNTING.
   - Fix the OPK-102 board as shown in the figure.
   - Attach the OPK-102 to bundle the cords with the cord clamp.



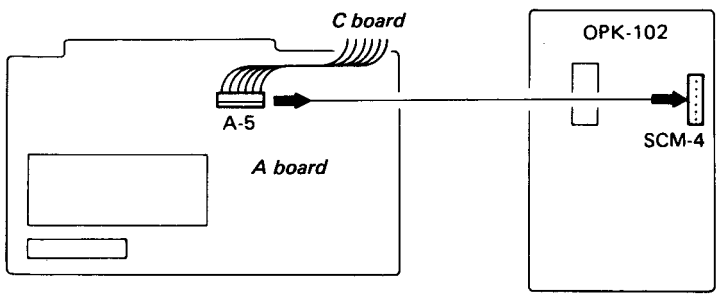
3. CONNECTOR CONNECTING
   - Connect the other end of the harness connected to the OPK-102 board to each connector on the A and C boards, respectively, as shown in the figure below.
     (Refer to the connector arrangement on the A, C and OPK-102 boards.)



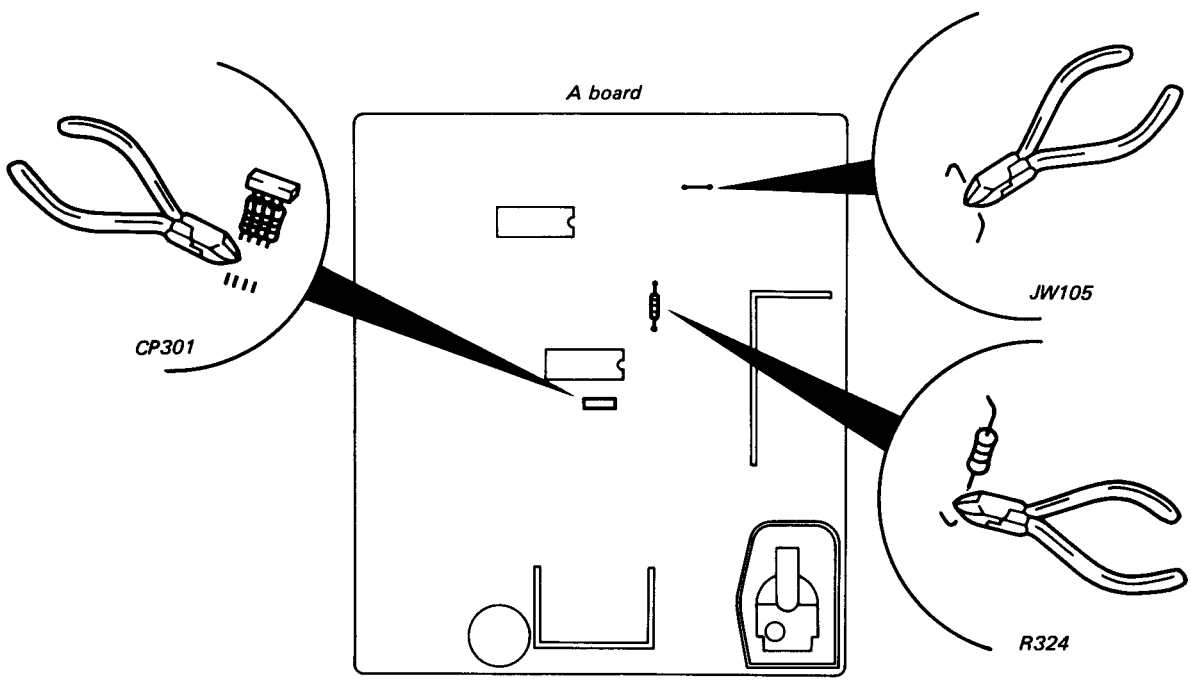
Disconnect and connect to SCM-4



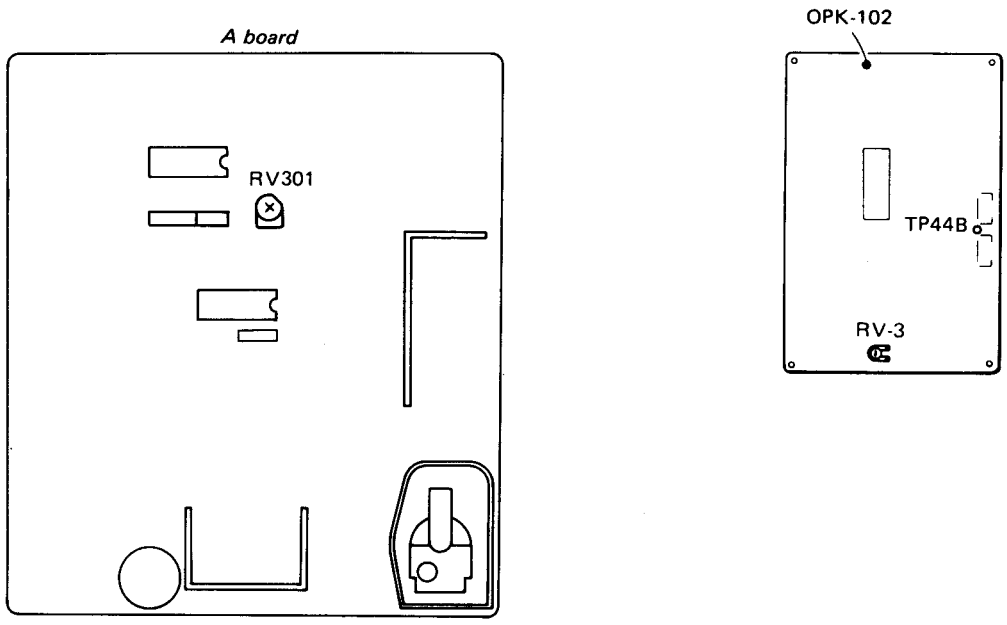
Connector arrangement on OPK-102 board.



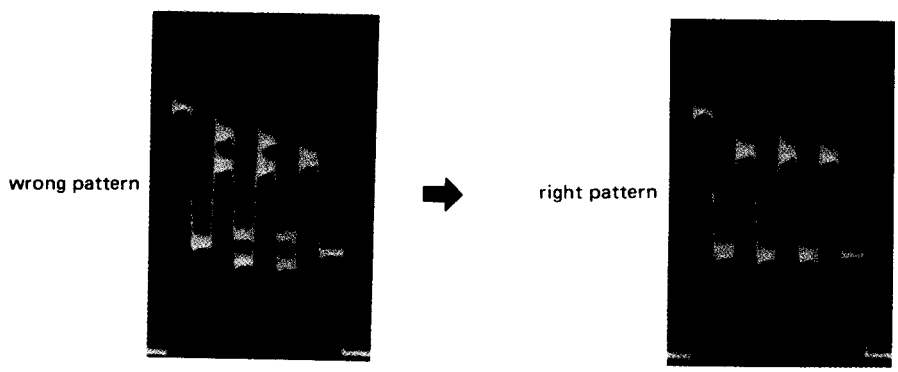
4. A BOARD REMODELING
   - Cut off the jumper (JW105), CP301 and R324 using a nipper as shown in the figure.



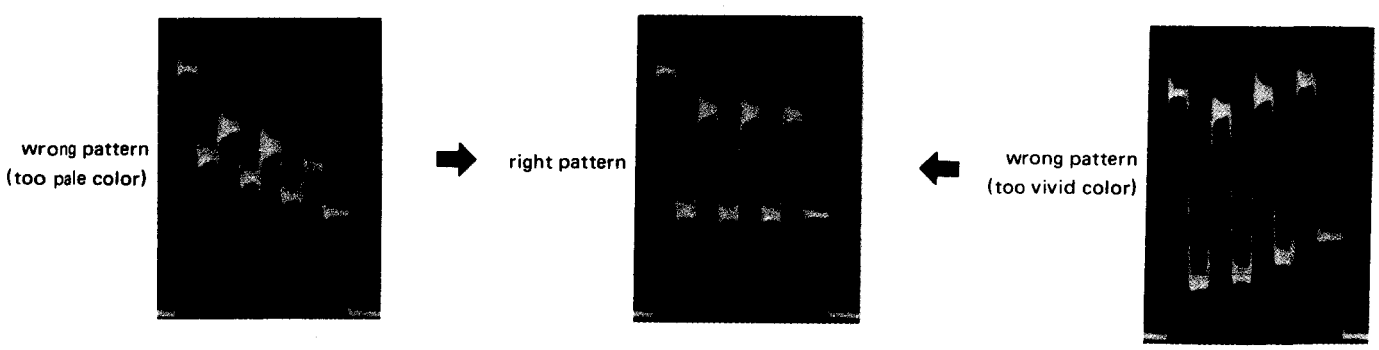
2-6. ADJUSTMENT



1. Plug the set to a wall outlet and turn on the power.
2. Connect the oscilloscope to the TP44B oscilloscope test pin on the OPK-102.
3. Select the SECAM color channel and adjust the color bar pattern (RV-3).



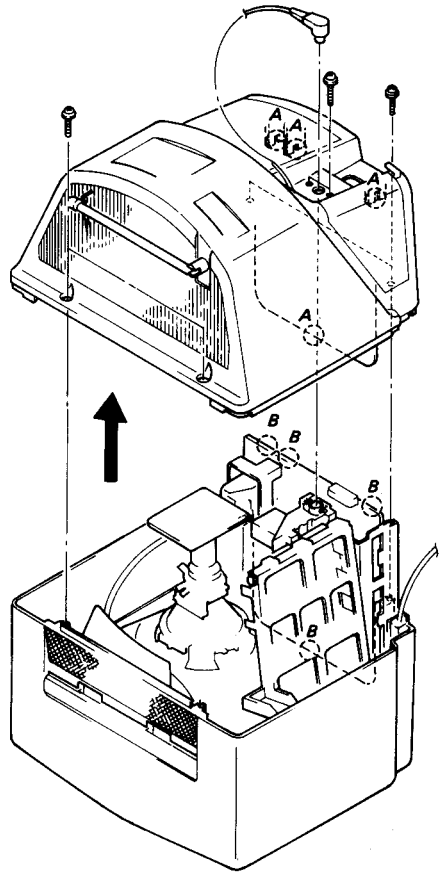
4. Select the PAL color channel and adjust the color bar pattern (RV301).



2-7. OPK-103 BOARD ATTACHING

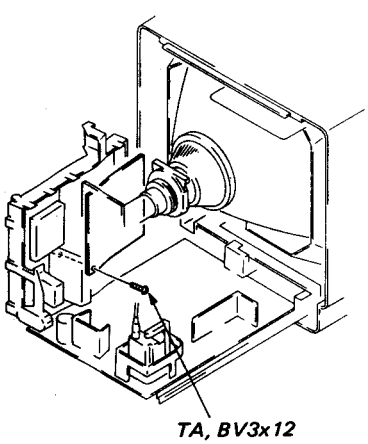
Before installing the OPK-103G, unplug the set from the wall outlet.
After the installation is completed, check that the TV operates properly.

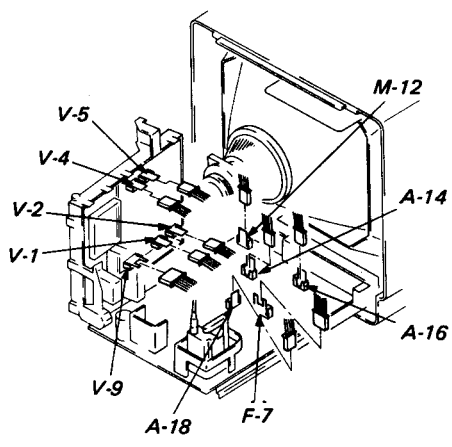
1. Remove the back cover.

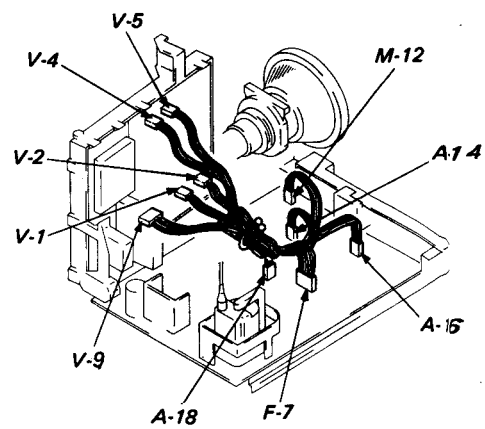


2. OPK-103 BOARD MOUNTING.

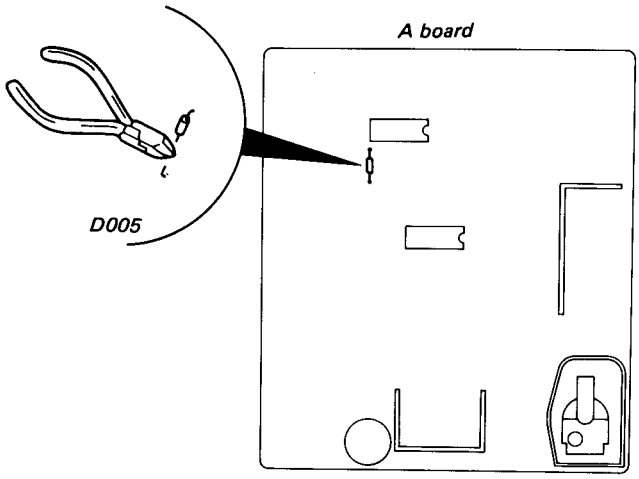
- Fix the OPK-103 board as shown in the figure.
- Attach the OPK-103G to bundle the cords with the cord clamp.

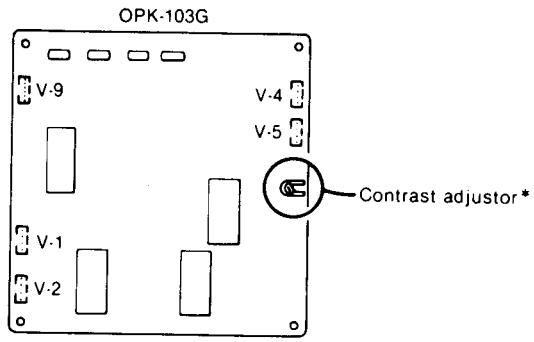






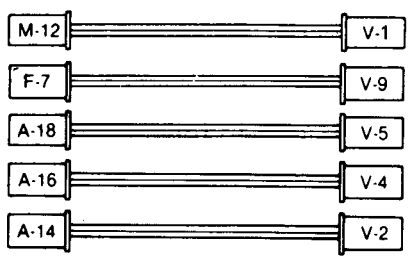
- Connect the printed wiring board A and the OPK-103G referring to "connecting the cable".
- Cut off the D005 on the A board.

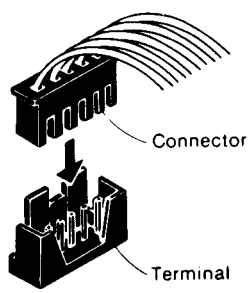




* This adjusts the picture contrast.
After connecting the cable, turn on the power and adjust the picture contrast by using the screwdriver.

Connect to the same number terminal as the connector. The connected terminals are colored red.





SECTION 3
SETUP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:

- ◑ (picture) control ..... maximum (fully clockwise)
- ☼ (brightness) control ..... maximum (fully clockwise)
- AFT switch ..... ON

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. White Balance

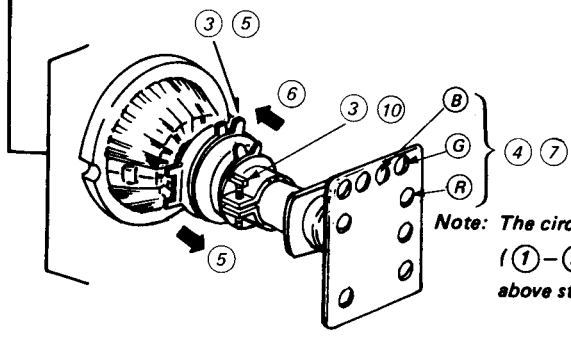
Note: Test Equipment Required.
1. Color-bar/Pattern Generator
2. Degausser

3-1. BEAM LANDING

Preparation:

- Feed in the white pattern.
- Before starting, degauss the entire screen.

1 Turn on set power supply and receive an all-white signal.
2 Evenly degauss the entire screen.
3 Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Figure 1-1.
4 Set BKG VR Ⓡ to maximum and set Ⓑ and Ⓖ to minimum.
5 Move the deflection yoke back, and adjust the purity control so that Ⓡ is in the center and Ⓖ and Ⓑ are at the sides, evenly. (Figure 1-2.)
6 Move the deflection yoke forward so that the entire screen is red.
* If the deflection yoke is pushed all the way to the CRT then moved slightly back, landing adjustment is easier.
7 Substitute Ⓖ, then Ⓑ for Ⓡ in step 4 and check landing.
8 Rotate Ⓡ, Ⓖ and Ⓑ once each and check landing.
9 When landing is not right, adjust the purity control and use magnets as shown in Figure 1-3, then repeat steps 7 and 8.
10 When a magnet is used, be sure to perform step 2, and tighten deflection yoke mounting screw loosely.



Note: The circled numbers (①–⑨) show above steps.

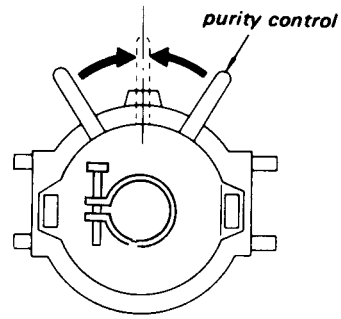


Fig. 1-1

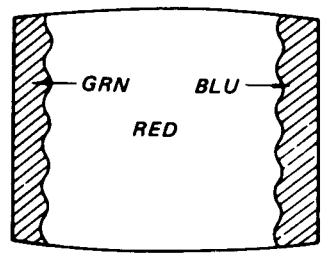


Fig. 1-2

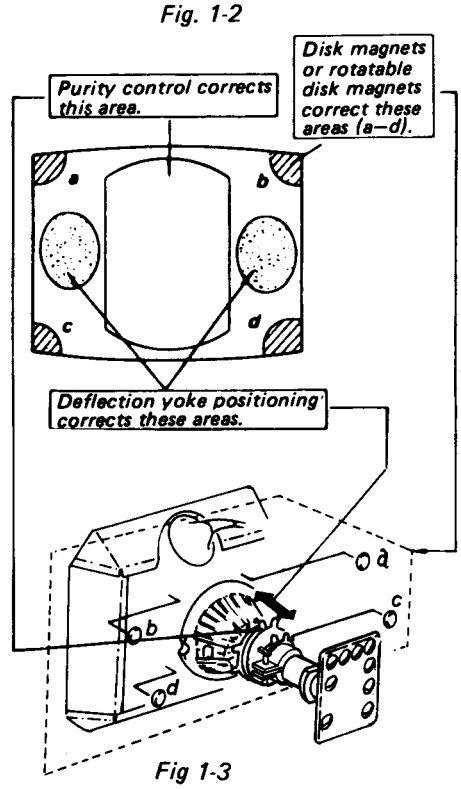


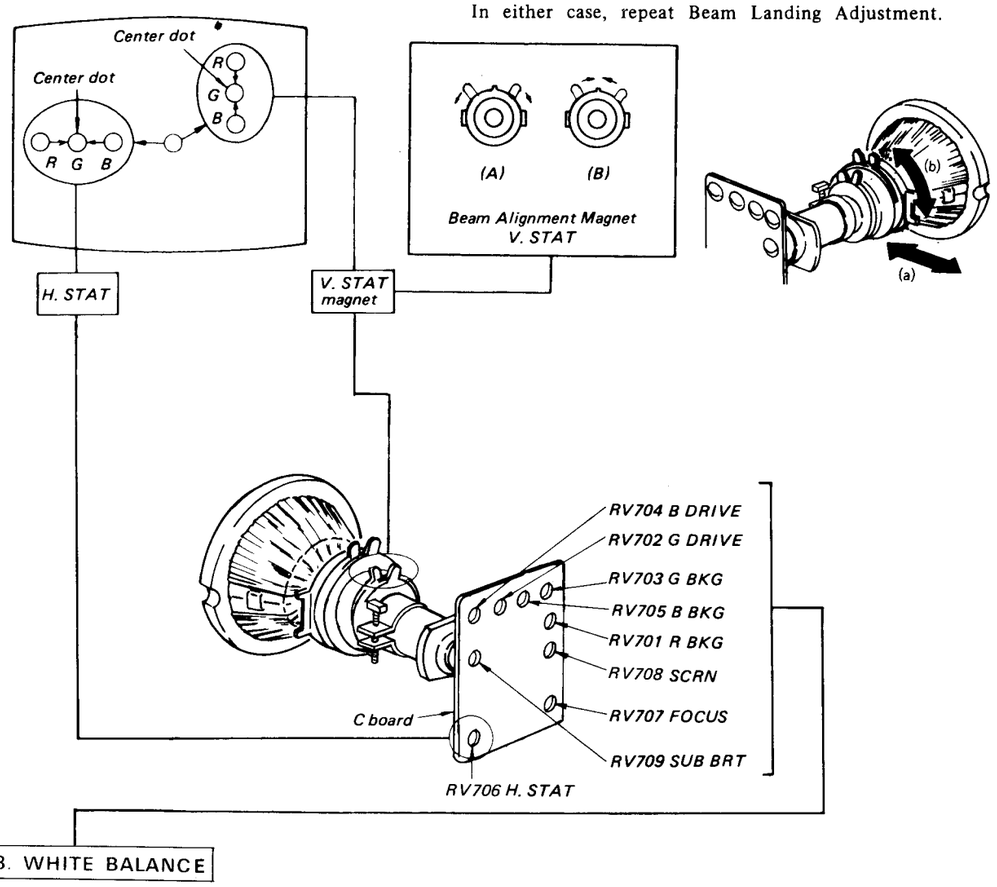
Fig 1-3

3-2. CONVERGENCE

Preparation:

- Before starting this adjustment, perform FOCUS, H. SIZE and V. SIZE adjustments.
- Turn BRIGHTNESS control fully counterclockwise.
- Feed in a dot pattern.

(1) Horizontal and Vertical Static Convergence



If blue dot does not coincide with red and green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.

3-3. WHITE BALANCE

(1) SCREEN (G2)

1. In put a dots pattern.
2. Set the PICTURE control at minimun and turn the BRIGHT control fully counterclock wise.
3. Confirm that BKG voltage is less than 160V dc when turning RV701 (R.BKG), RV703 (G.BKG) and RV705 (B.BKG).
4. Note the color which becomes visible first when turning RV708 (SCRN).

(2) WHITE BALANCE

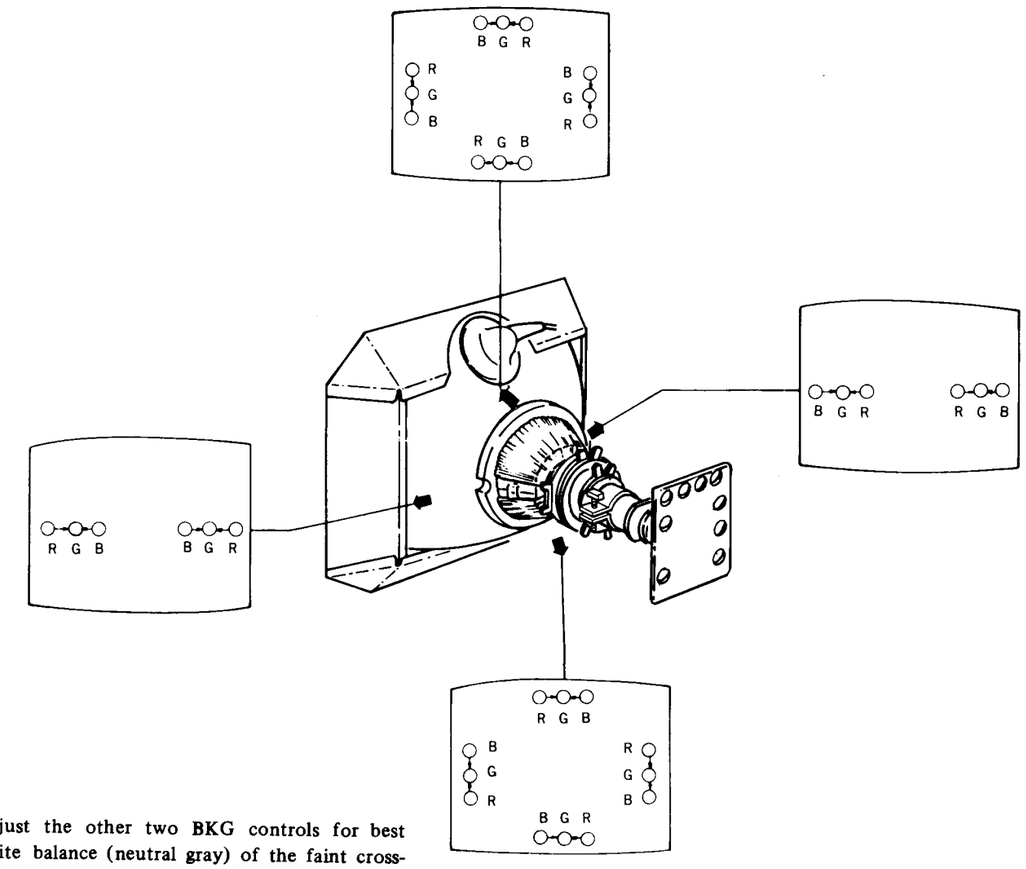
1. Input a cross-hach pattern.
2. Set the PICTURE control to minimun and turn the BRIGHT control click position.
3. Turn RV704 (B.DRIVE) and RV702 (G.DRIVE) fully clockwise.
4. Set RV701 (R.BKG), RV703 (G.BKG) and RV705 (B.BKG) to minimun.
5. Turn RV709 (SUB BRT) slowly to obtain a faintly visibe cross-hatch. Note the color that first becomes visible by turning RV709. Do not turn a BKG control for this color.

(2) Dynamic Convergence Adjustment

Preparation:

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.

1. Loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergence as shown below.
4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.



6. Adjust the other two BKG controls for best white balance (neutral gray) of the faint cross-hach.
7. Set the PICTURE control to maximum and turn the BRIGHT control fully clockwise. Observe the screen and adjust the DRIVE controls for best white balance.
8. Repeat steps 1. through 8. several times.

Note: (1)

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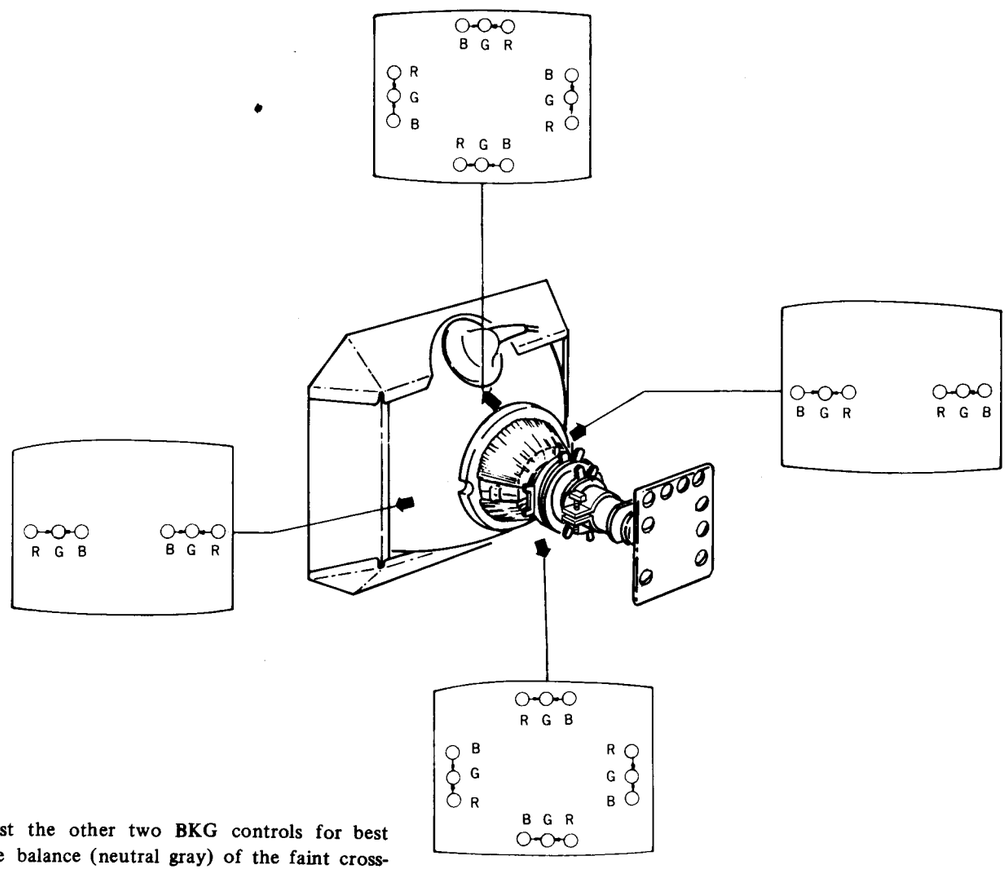
(2) Dynamic Convergence Adjustment

Preparation:

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.

1. Loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergence as shown below.
4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.



6. Adjust the other two **BKG** controls for best white balance (neutral gray) of the faint cross-hach.
7. Set the PICTURE control to maximum and turn the BRIGHT control fully clockwise. Observe the screen and adjust the DRIVE controls for best white balance.
8. Repeat steps 1. through 8. several times.

SECTION 4

CIRCUIT ADJUSTMENTS

Note: (1) TEST EQUIPMENT REQUIRED

1. Oscilloscope
2. Digital multimeter
3. Color-bar/pattern generator
4. Variable auto-transformer
5. Isolation transformer
6. Regulated-dc power supply

(2) INPUT SIGNAL

When making these adjustments, supply a color-bar or an off-air signal.

(3) CONTROL SETTING

Controls and switches should be set as follows when making checks and adjustments unless otherwise noted.

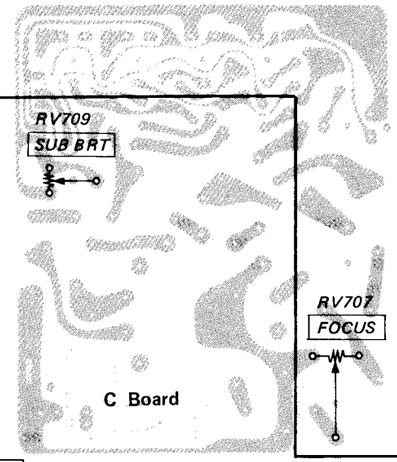
PICTURE control, COLOR control } initial setting
V. HOLD control ..... set for stable picture
BRIGHT control . . . . . set for best picture
AFT SW . . . . . ON

(4) These adjustments should be performed with the rated power supply voltage unless otherwise noted.

4-1. C BOARD ADJUSTMENTS

FOCUS

Adjust RV707 for best Focus.



SUB BRT

① Receive a broadcast.
② Turn the picture knob fully counterclockwise, and set the brightness knob for optimum picture.
③ Adjust RV709 for optimum brightness.
④ Set the picture knob for best picture.
⑤ Receive each channel and check that there are no extremes of brightness.

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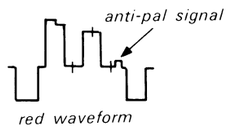
4-2. A BOARD ADJUSTMENTS

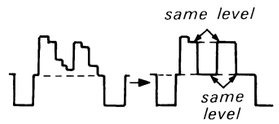
CW PHASE

1. *Feed in a special color-bar signal.*
2. *Connect an oscilloscope (B) to the pin 4 of A-5 connector.*
3. *Adjust RV303 so that the anti-pal signal of the red output is disappeared.*



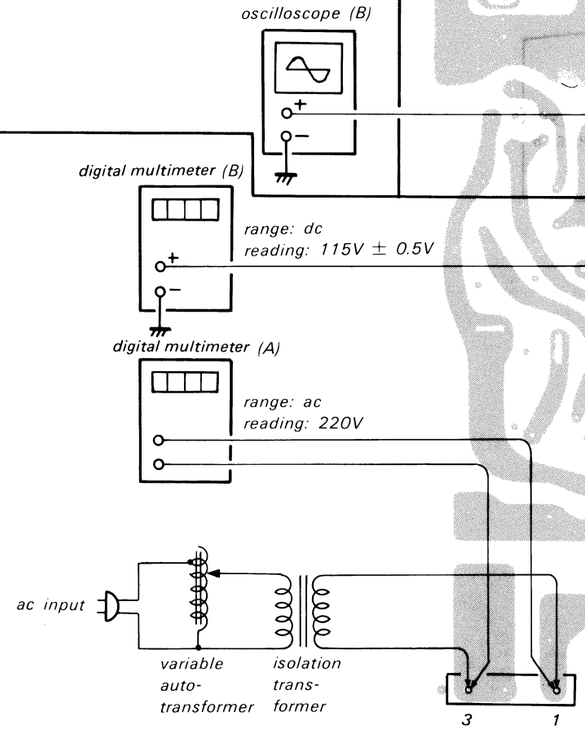
SUB COLOR

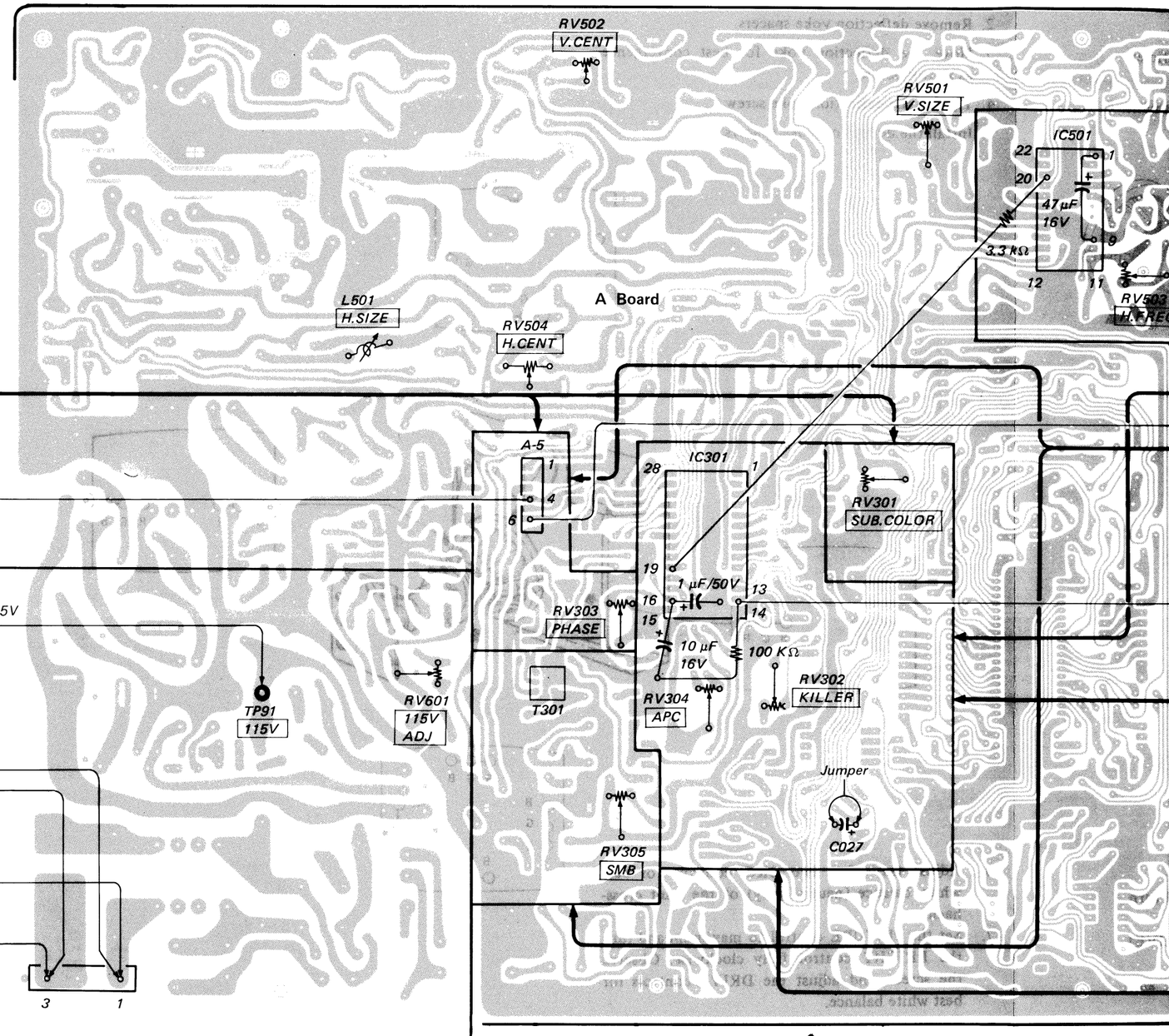
1. *Feed in a color-bar signal from color-bar/pattern generator.*
2. *Connect an oscilloscope (B) to the pin 4 of A-5 connector.*
3. *Adjust RV301 for a best waveform of the red output as shown.*

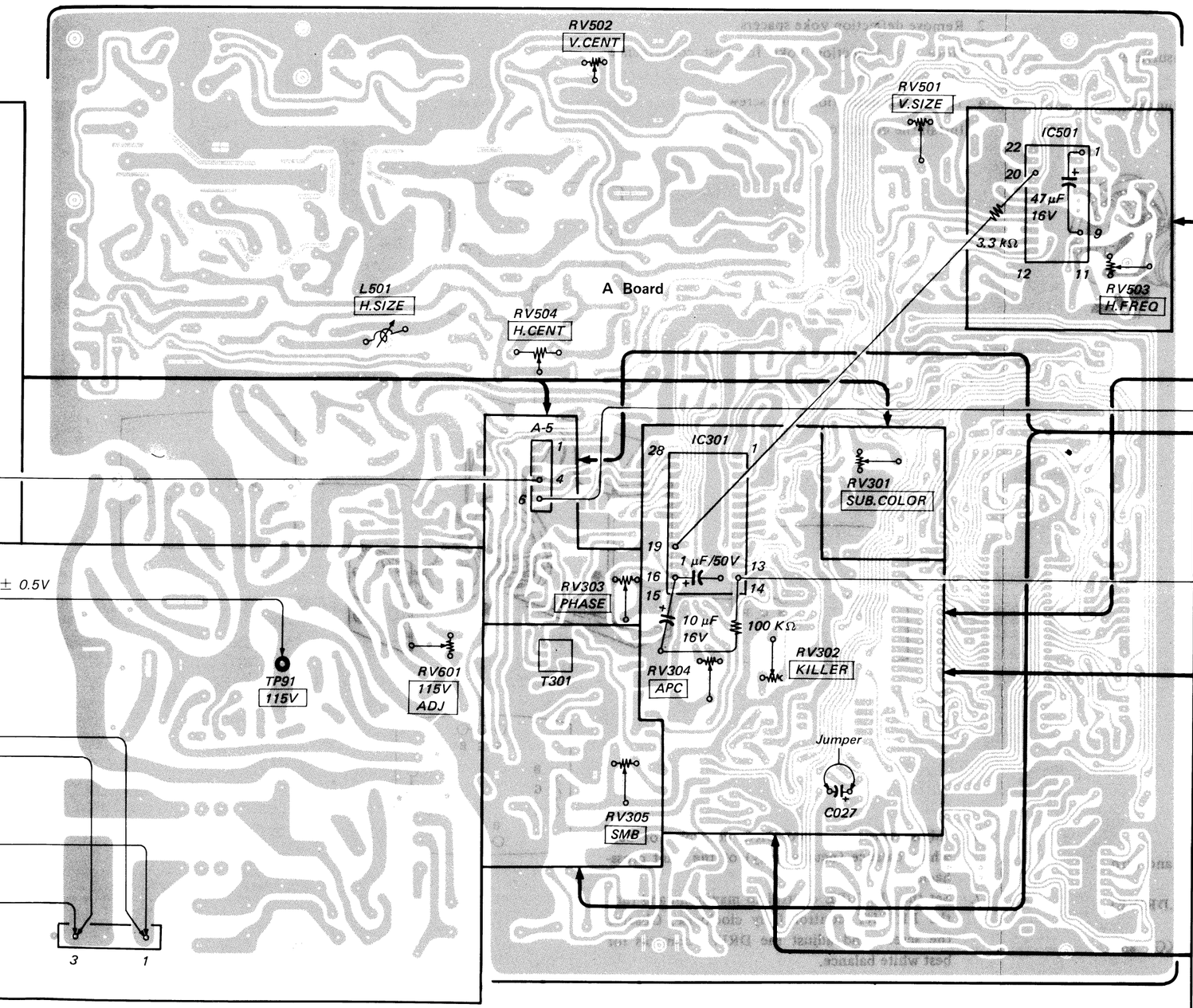


115V

1. *Adjust variable auto-transformer for 220V ac on digital multimeter (A).*
2. *Adjust RV601 for 115V ± 0.5V dc on digital multimeter (B).*







H. FREQ

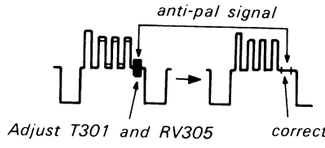
1. *Connect a 47 µF/16V capacitor between pins 1 and 9 of IC501.*
2. *Connect a 3.3 kΩ resistor between pin 20 of IC501 and pin 19 of IC301.*
3. *Short-circuit electrolytic capacitor (C027).*
4. *Adjust RV503 for stable picture.*

oscilloscope (A)

digital multimeter

1H DELAY

1. *Feed in a special color-bar signal.*
2. *Connect an oscilloscope (A) to the pin 6 of A-5 connector.*
3. *Adjust T301 and RV305 to obtain the waveform as shown.*



KILLER

1. *Feed in a black and white off-air signal.*
2. *Connect a 1 µF/50V capacitor between pin 16 of IC301 and ground during this adjustment.*
3. *Adjust RV302 so that the voltage on pin 13 of IC301 is 7.9 ± 0.1V dc.*

APC (4.433 MHz)

1. *Feed in a color-bar signal from color-bar/pattern generator.*
2. *Connect a 100 kΩ resistor between pin 13 of IC301 and ground during this adjustment.*
3. *Connect a 10 µF/16V capacitor between pin 16 of IC301 and ground during this adjustment.*
4. *Adjust RV304 for the stable color pattern.*

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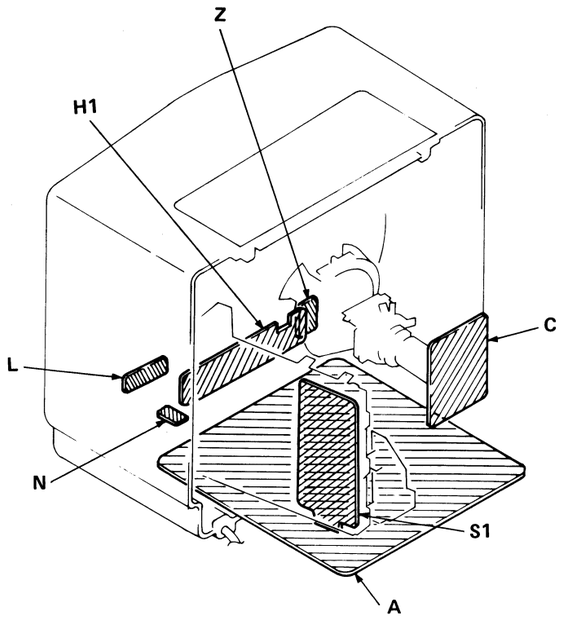
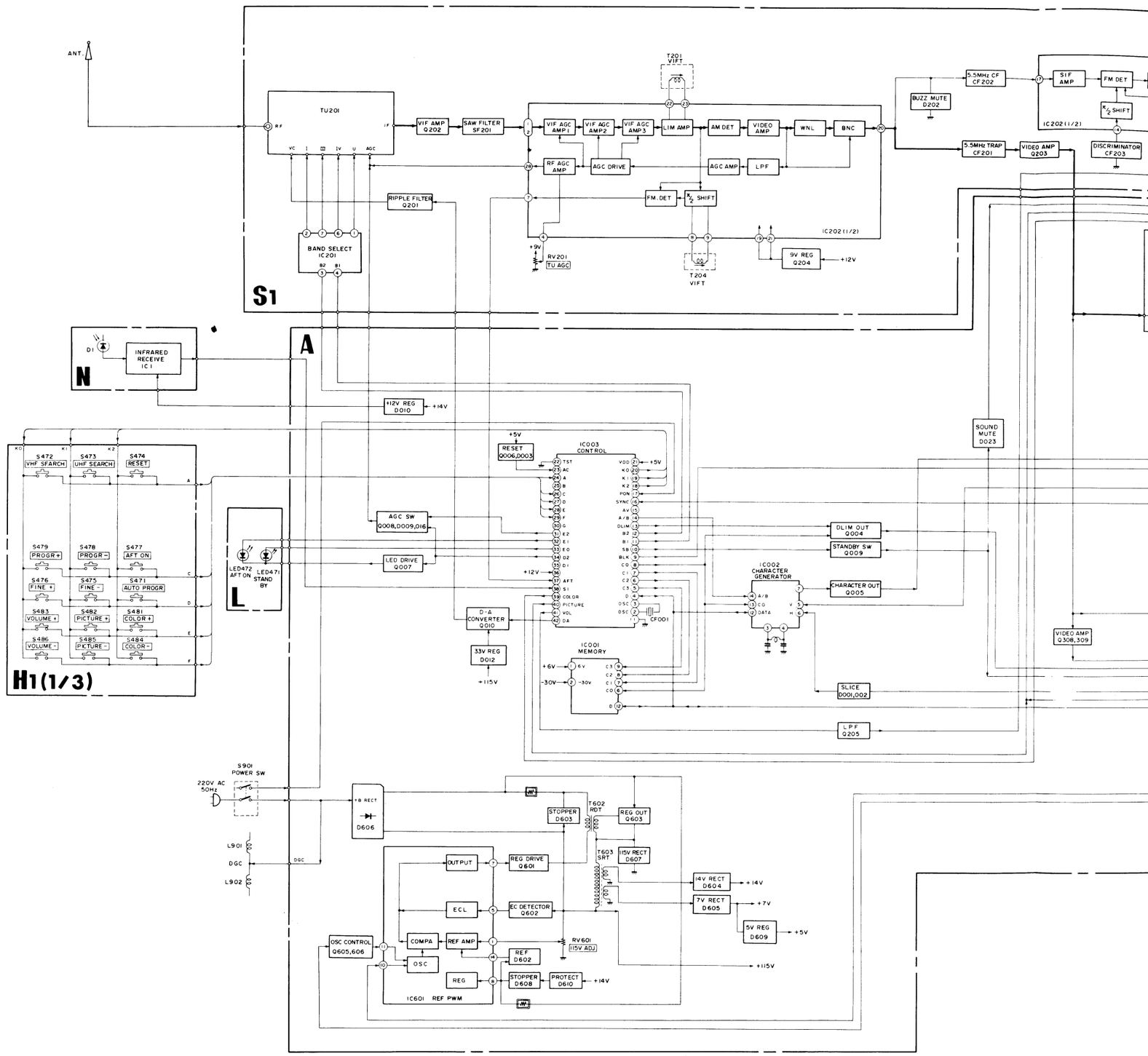
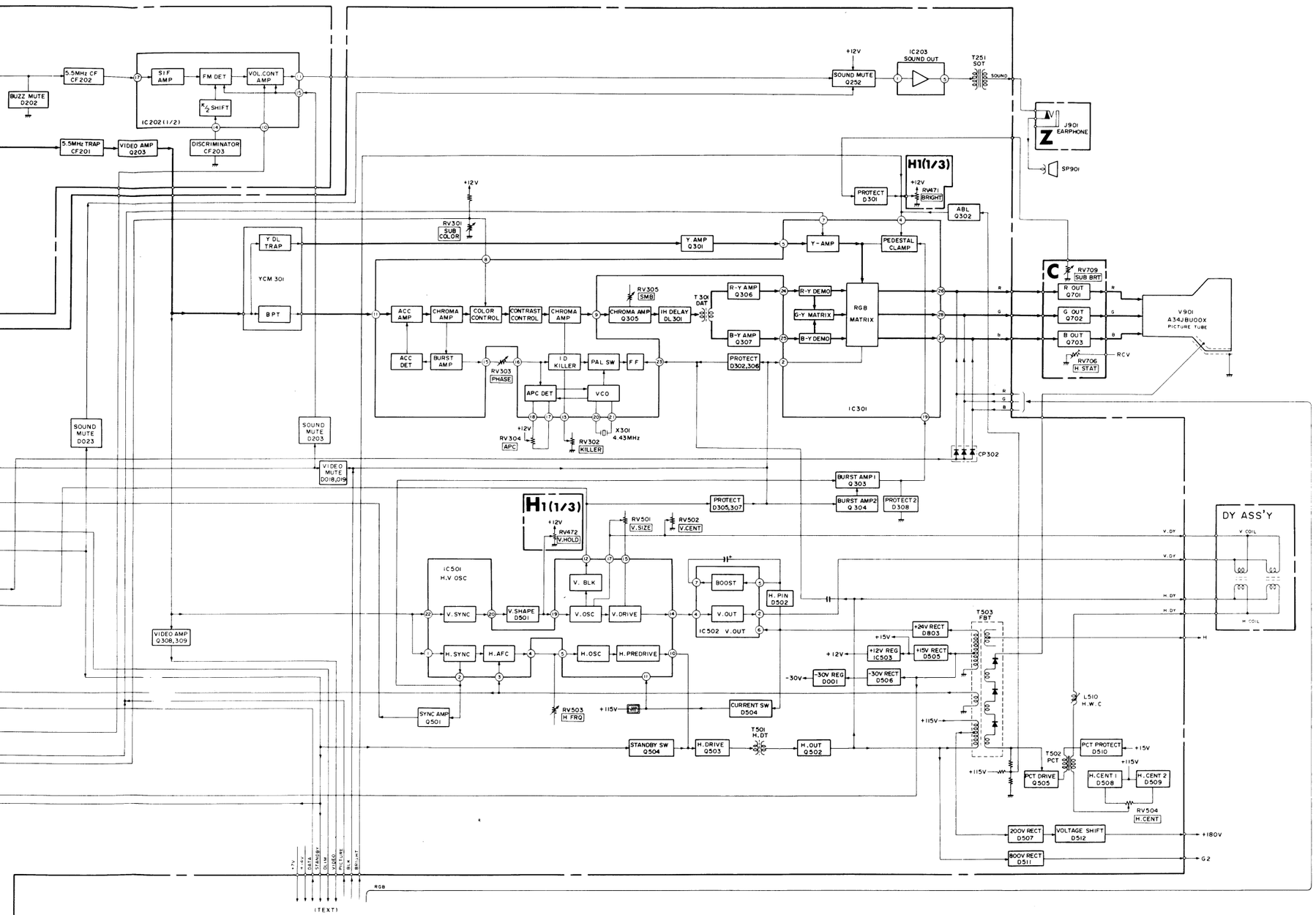
SECTION 5
DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



5-2. BLOCK DIAGRAM



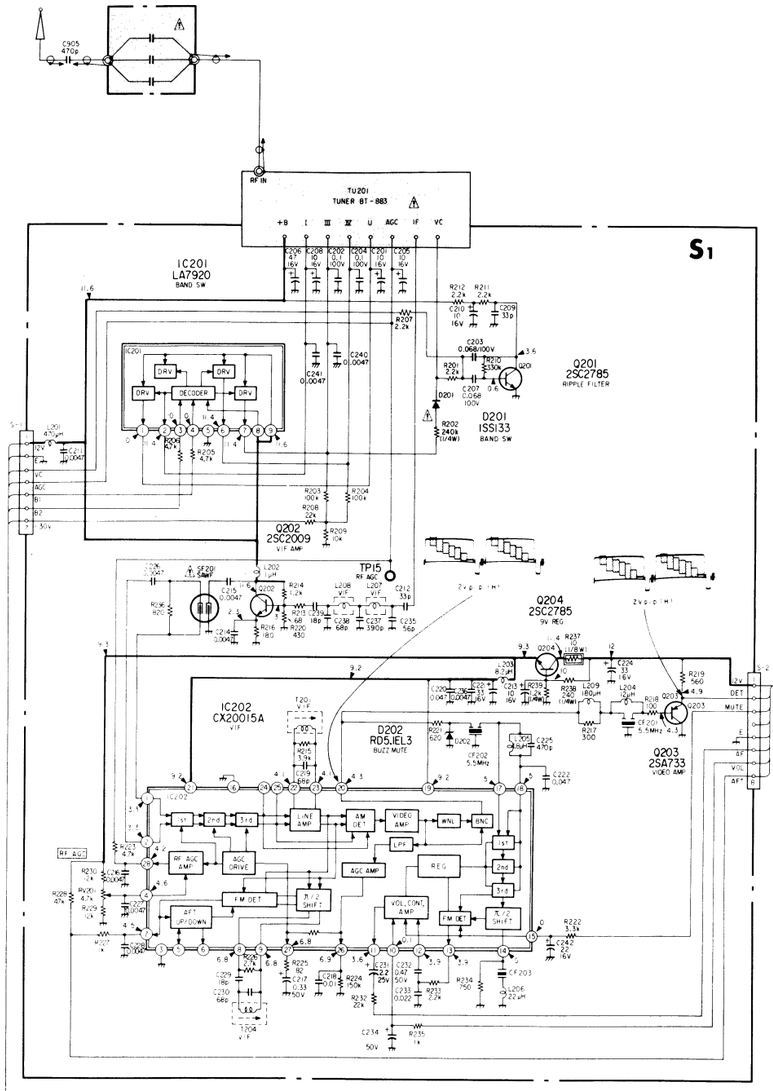

5.5MHz CF CF202
SIF AMP
FM DET
VOL.CONT AMP
BUZZ MUTE D202
IC202(1/2)
5.5MHz TRAP CF201
VIDEO AMP Q203
DISCRIMINATOR CF203
+12V
SOUND MUTE Q252
IC203 SOUND OUT
T251 SOT
SOUND
J901 EARPHONE
SP901
H1(1/3)
PROTECT D301
RV471 BRIGHT
ABL Q302
RV301 SUB COLOR
Y DL TRAP
YCM 301
BPT
Y AMP Q301
Y-AMP
PEDESTAL CLAMP
RV709 SUB BRT
R OUT Q701
G OUT Q702
B OUT Q703
RV706 H STAT
RCV
V901 A34JBUOOX PICTURE TUBE
RV305 SMB
ACC AMP
CHROMA AMP
COLOR CONTROL
CONTRAST CONTROL
CHROMA AMP
CHROMA AMP Q305
1H DELAY DL301
T301 DAT
R-Y AMP Q306
B-Y AMP Q307
R-Y DEMO
G-Y MATRIX
B-Y DEMO
RGB MATRIX
ACC DET
BURST AMP
RV303 PHASE
ID KILLER
PAL SW
F F
PROTECT D302,306
APC DET
VCO
RV304 APC
RV302 KILLER
X301 4.43MHz
IC301
CP302
SOUND MUTE D023
SOUND MUTE D203
VIDEO MUTE D018,019
BURST AMP1 Q303
BURST AMP2 Q 304
PROTECT2 D308
PROTECT D305,307
RV501 V.SIZE
RV502 V.CENT
RV472 V.HOLD
DY ASS'Y
V COIL
H COIL
IC501 H.V OSC
V. BLK
V.SYNC
V.SHAPE D501
V.OSC
V.DRIVE
BOOST
V.OUT
IC502 V.OUT
H. PIN D502
H.SYNC
H.AFC
H.OSC
H.PREDRIVE
VIDEO AMP Q308,309
SYNC AMP Q501
RV503 H.FRQ
+115V
CURRENT SW D504
STANDBY SW Q504
H.DRIVE Q503
T501 H.DT
H.OUT Q502
T503 FBT
+24V RECT D803
+15V RECT D505
+12V REG IC503
-30V REG D001
-30V RECT D506
L510 H.W.C
T502 PCT
PCT PROTECT D510
PCT DRIVE Q505
H.CENT 1 D508
H.CENT 2 D509
RV504 H.CENT
200V RECT D507
VOLTAGE SHIFT D512
800V RECT D511
+180V
G2
(TEXT)
RGB

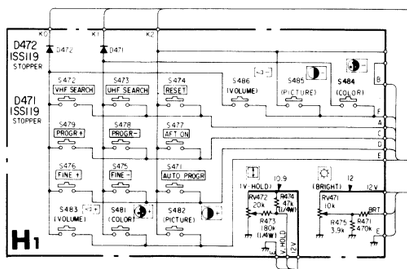
A [Y&CHROMA AMP, H • V SYNC, POWER SUPPLY, AF OUT, SYSTEM CONTROL]

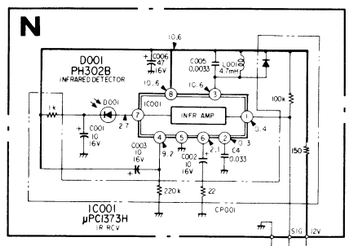
H1 [CUSTOMER CONTROL] S1 [TUNER, VIF] C [R • G • B OUT] N [INF AMP] L [INDICATOR] Z [JA

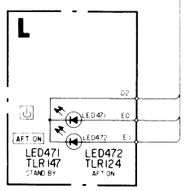
A B C D E F G H I J K L M N O P

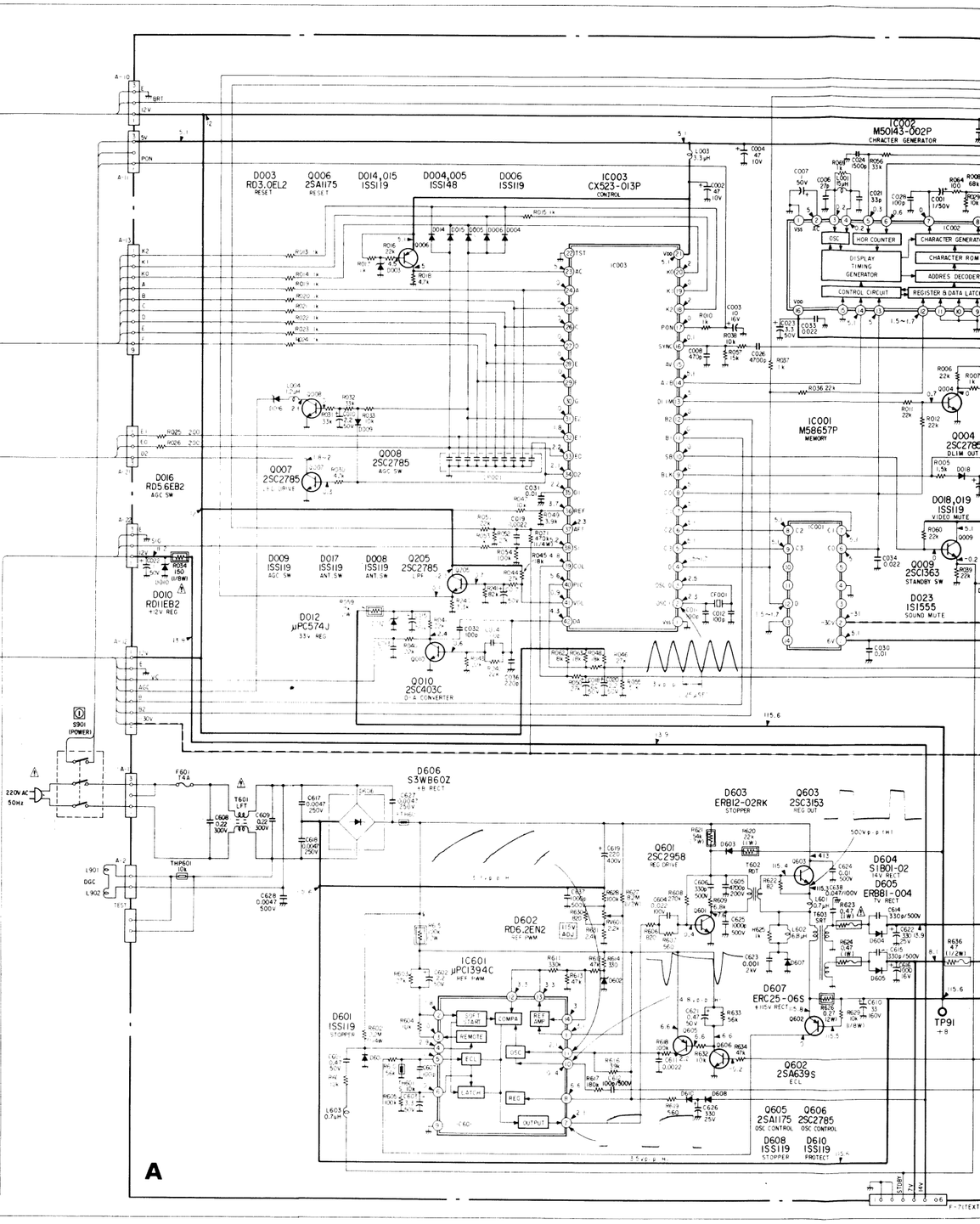
1 2 3 4 5 6 7 8 9 10





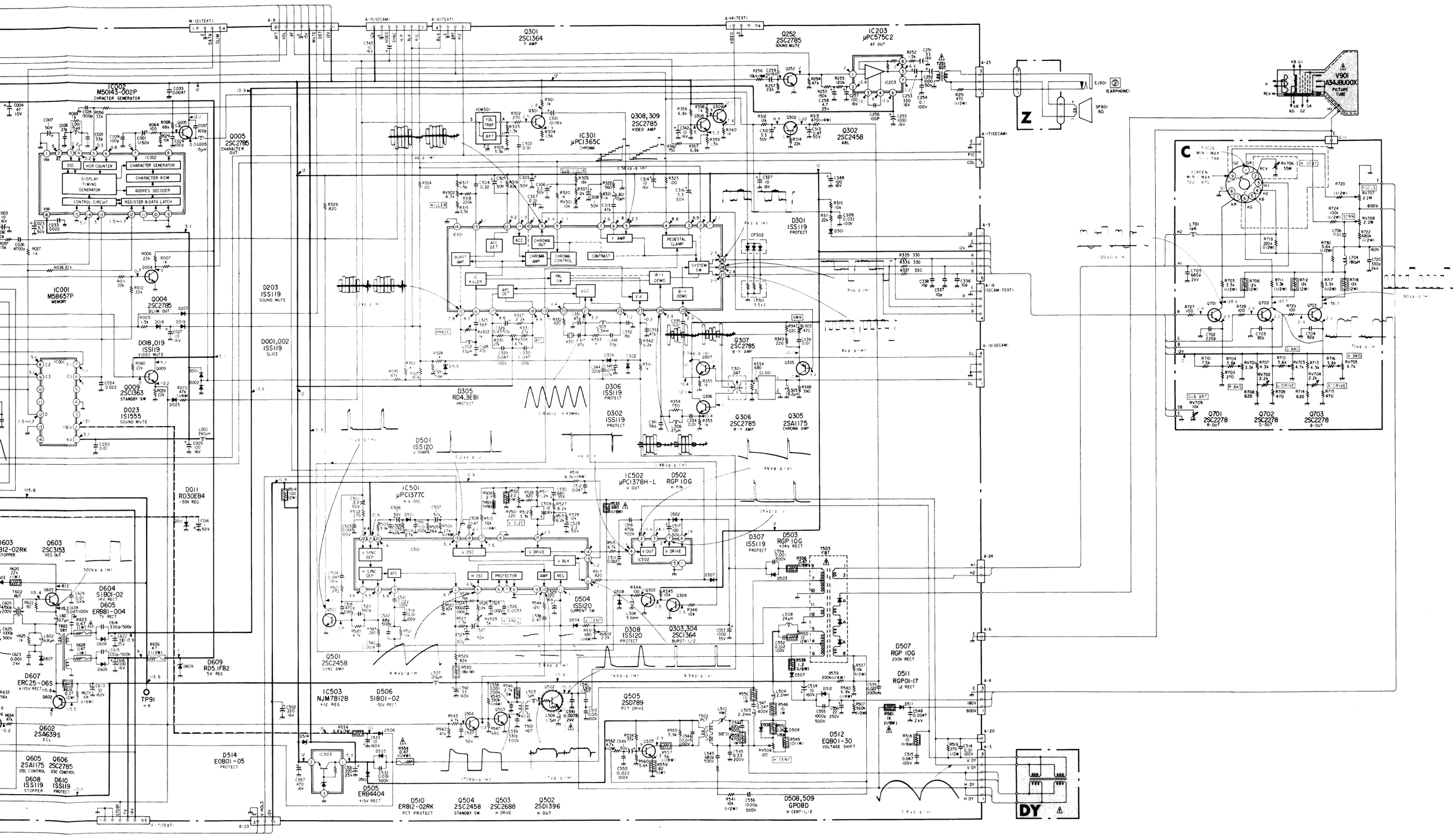






L [INDICATOR] Z [JACK]

O P Q R S T U V W X Y Z A1 B1 C1 D1 E1



5-4. PRINTED WIRING BOARD

A [Y&CHROMA AMP, H • V SYNC, POWER SUPPLY, AF OUT, SYSTEM CONTROL]

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, 1/6W unless otherwise noted. kΩ = 1000Ω, MΩ = 1000kΩ
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- : panel designation.
- All voltages are in V.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 MΩ digital multimeter.
- Voltage variations may be noted due to normal production tolerances.
- Readings are taken with a color-bar signal input.
- : adjustment for repair.
- ——— : B + bus
- ----- : B – bus

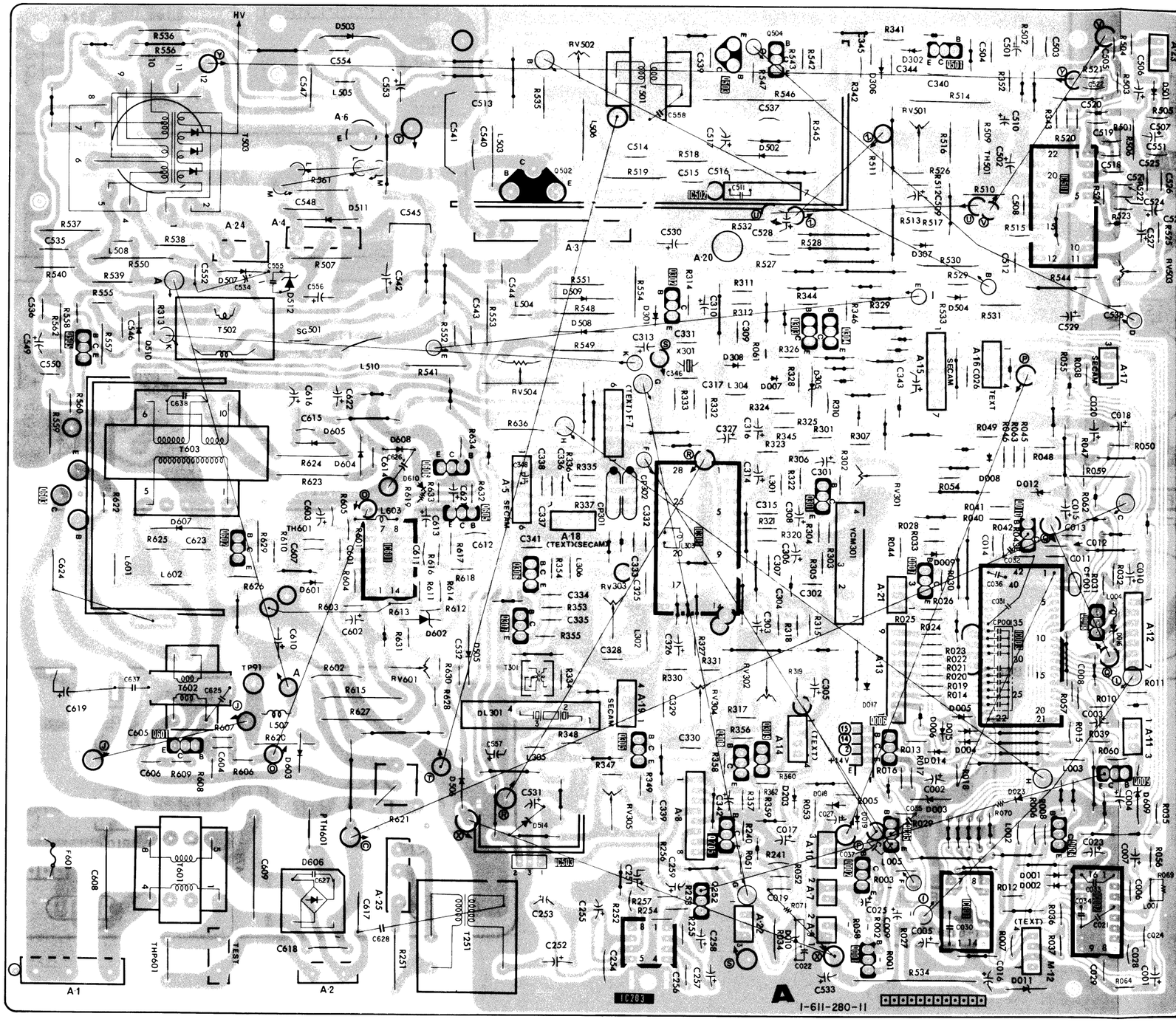
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

A B C D E F G H I J K L

1 2 3 4 5 6 7 8 9

– Conductor Side –

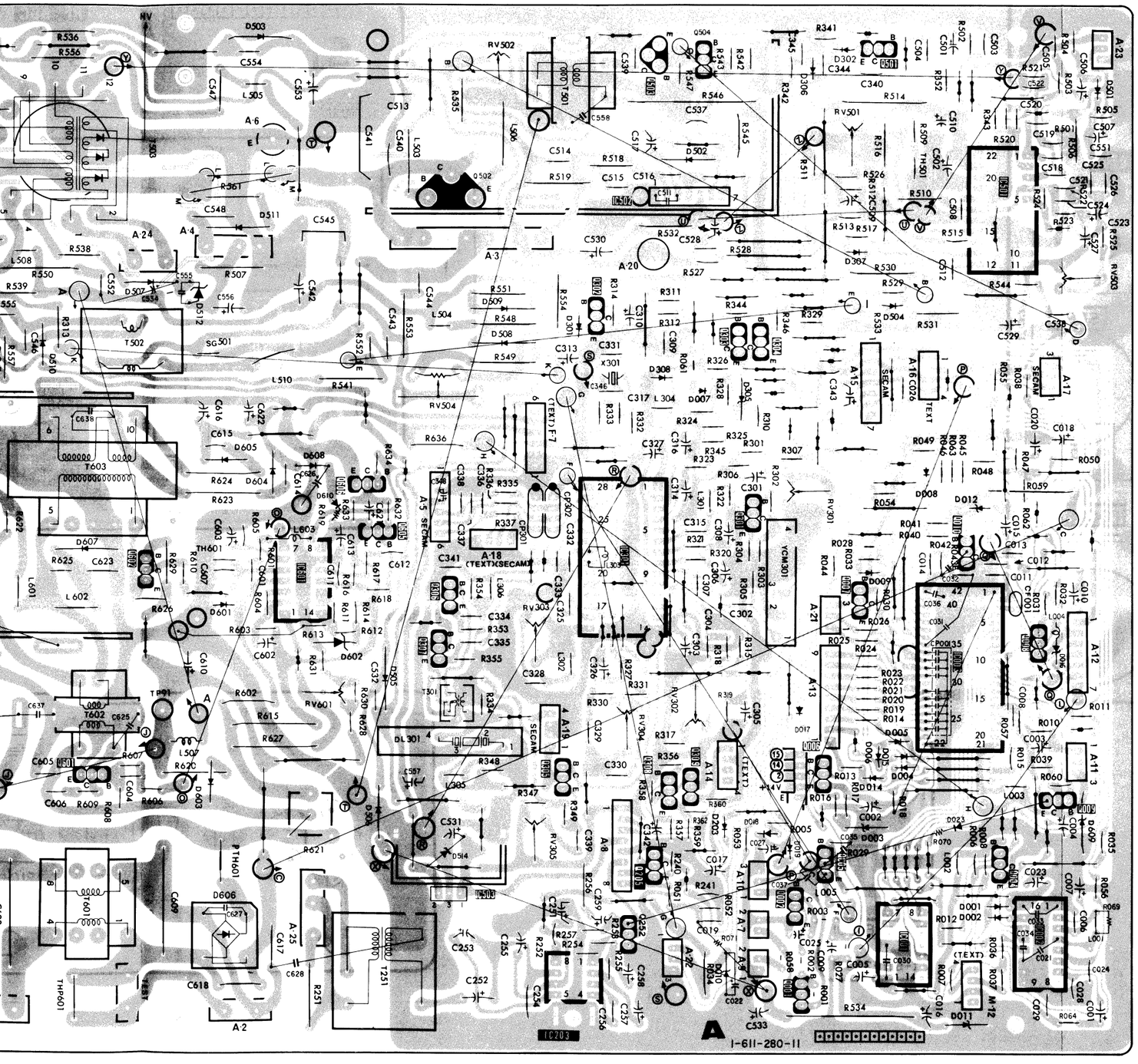
[A Board]



KV-1412EG
RM-635

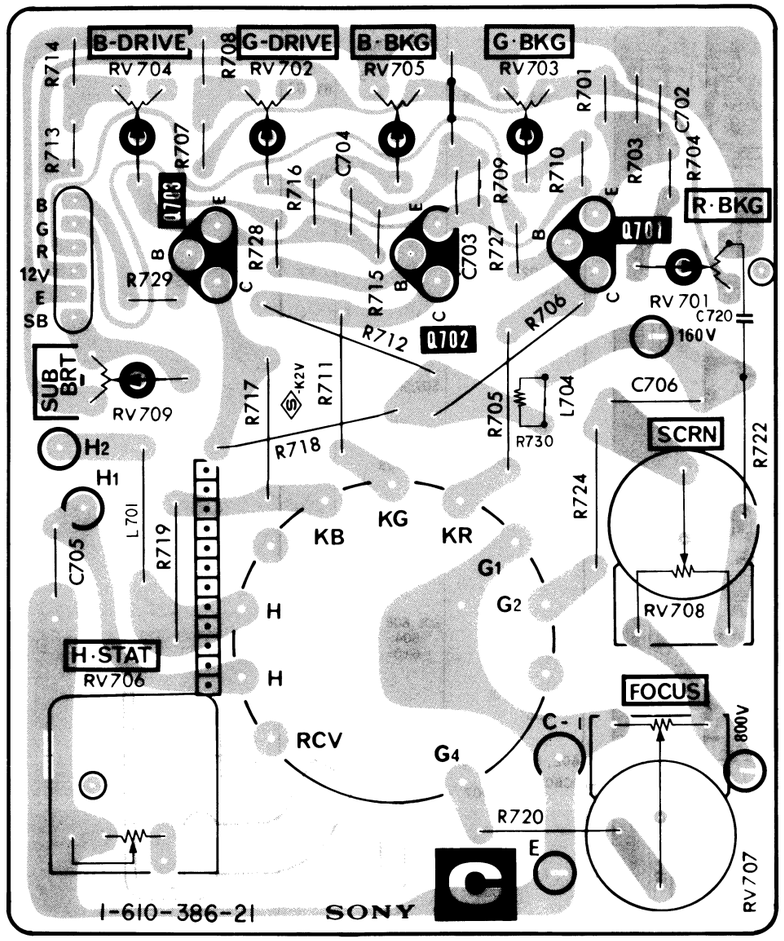
A [Y&CHROMA AMP, H • V SYNC, POWER SUPPLY, AF OUT, SYSTEM CONTROL]

D E F G H I J K L M N O P Q R S

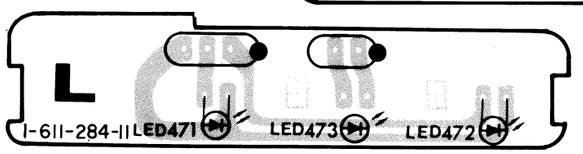


IC , Q	D	ADJ
	503 302 306 501	
503 504 501		RV502
		RV501
	502	
502 IC502 , IC501		
	511	
	307 507,512	RV503
302	509 504 510 301	
303,304	508	
505	308 305	RV504
	605,608 604	
606	610	RV301
603 301 605	012	
	607	
602, IC301 IC601	010 009	
306 007	601	
		RV303
307 008 IC003	602 016	
	505	RV601 RV304 RV302
	005	
601 305 308 006 309	006 015 603 014 004	
009	506 609	
	023,003 203 018 514 019	RV305
205 005 004		
IC503	001 002	
252 IC001 , IC002	606	
IC203	010	
	011	

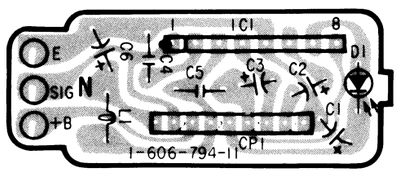
[C Board]



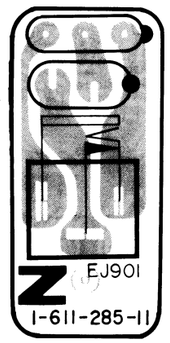
[L Board]



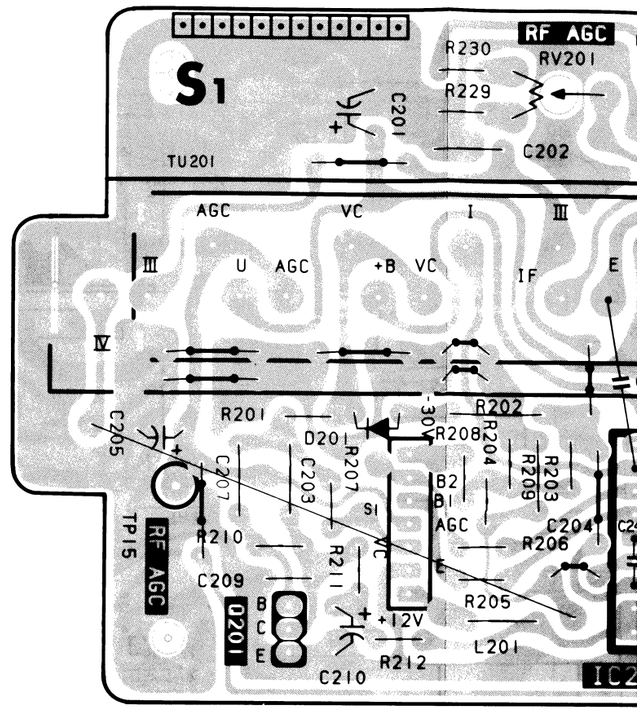
[N Board]



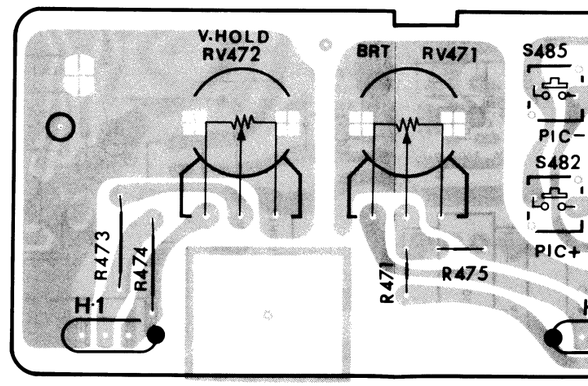
[Z Board]



[S1 Board]



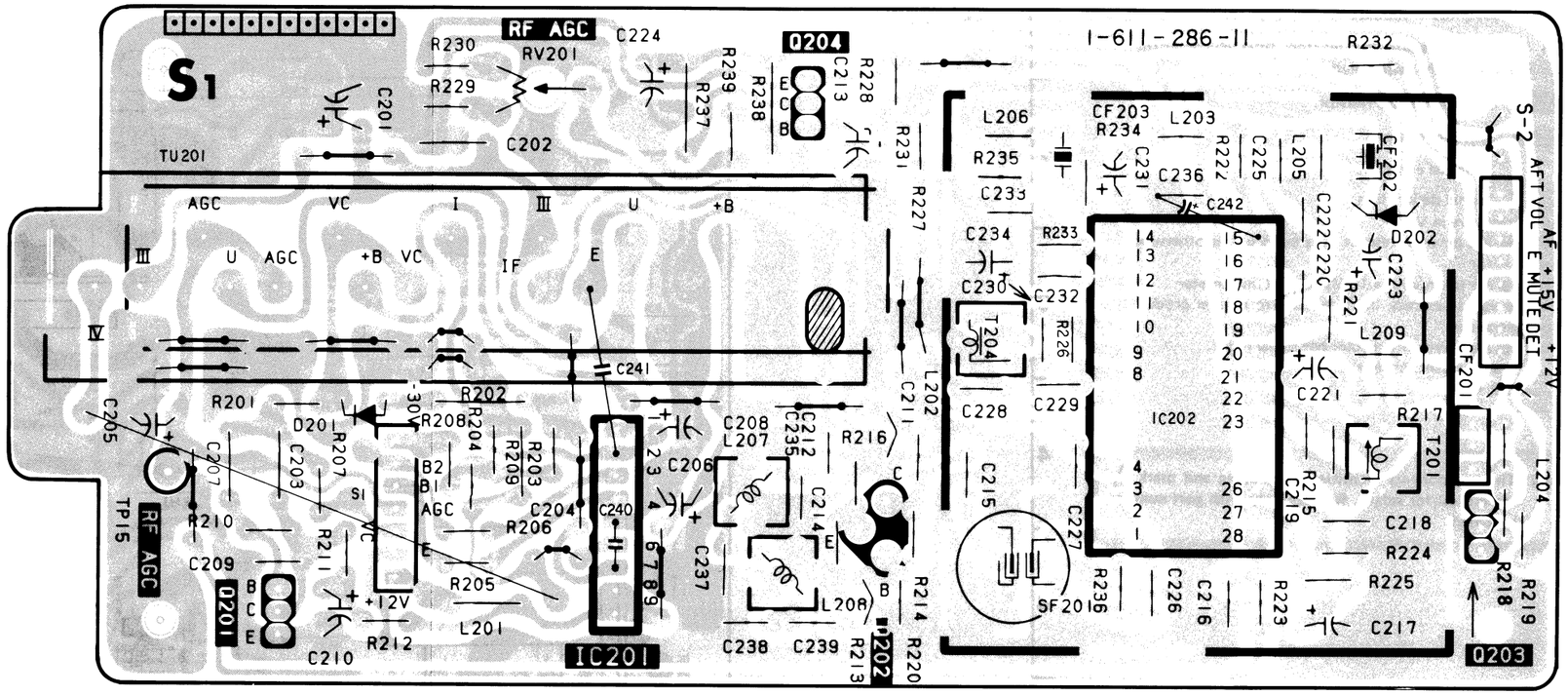
[H1 Board]



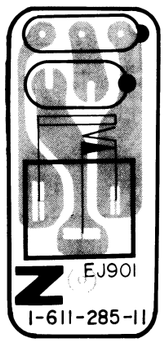
L [INDICATOR] Z [JACK]

H I J K L M N O P Q R S T U V W

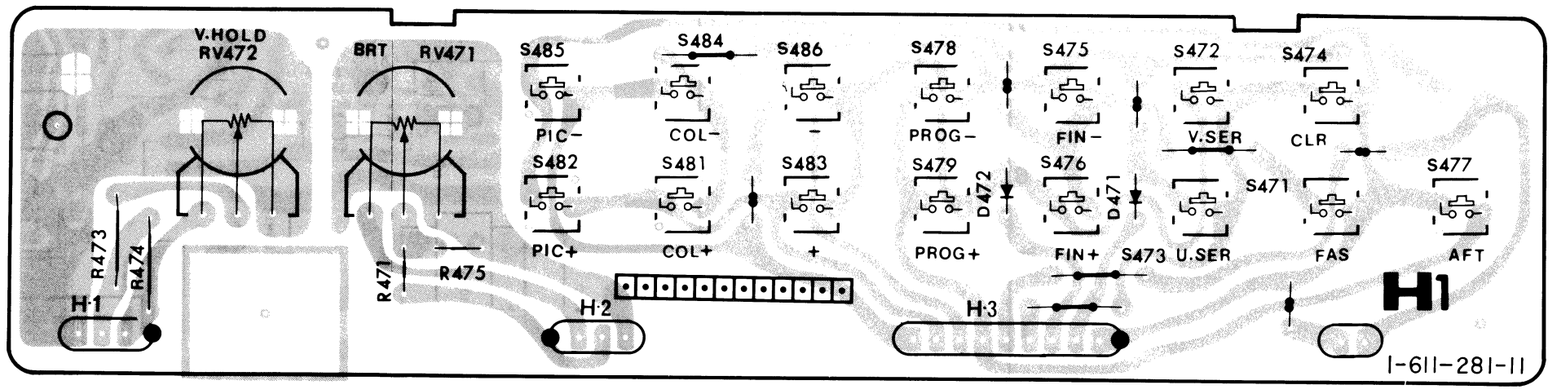
[S1 Board]



[Z Board]

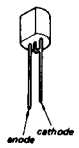


[H1 Board]

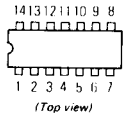


5-5. SEMICONDUCTORS

μPC574J



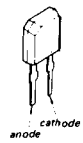
μPC1394C
M58657P



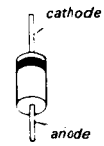
2SA1048
2SC2458
2SC403SP

2SC2958
2SD774

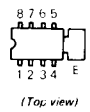
PH302B



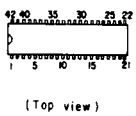
RD11E-B2 **RD6.2E-N2**
RD3.0EL2 **US1035**
RD30E-B4 **1N4148H**
RD4.3E-B1 **1S1555**
RD5.1E-L3 **1S2076**
RD5.1FB2 **1S2473**
RD5.6E-B2



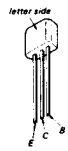
μPC575C
μPC575C2



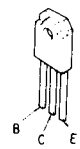
CX523-013P



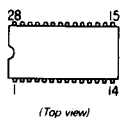
2SA1175
2SC2785



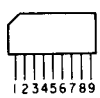
2SC3153
2SD1396



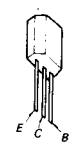
μPC1365C
CX20015A



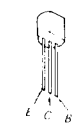
LA7920



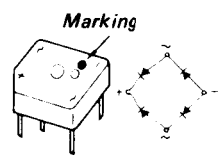
2SC403C
2SC633
2SC634



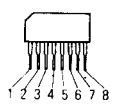
2SD789



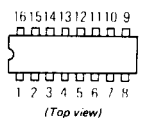
S3WB60Z



μPC1373H

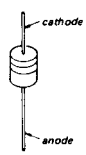


M50143-002P

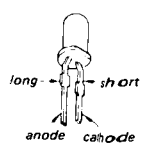


2SC1128
2SC2009

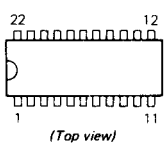
1SS119
1SS120
1SS133
1SS148



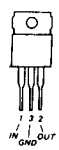
TLR124



μPC1377C

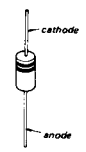


NJM7812B

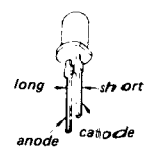


2SC2278

EQB01-05 **ERC24-06S**
EQB01-30 **ERC25-06S**
ERB81-004 **SIB01-02**

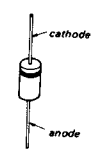


TLR147

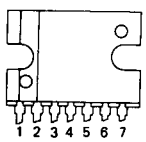


2SA639S **2SC1364**
2SA733 **2SC945**
2SC1363

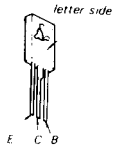
ERB12-02RK **RD5.1FB2**
ERB12-04RK **RGP01-17**
ERB44-04 **RGP10G**
ES1F **10E2**
GP08D



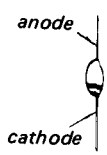
μPC1378H-L



2SC2688

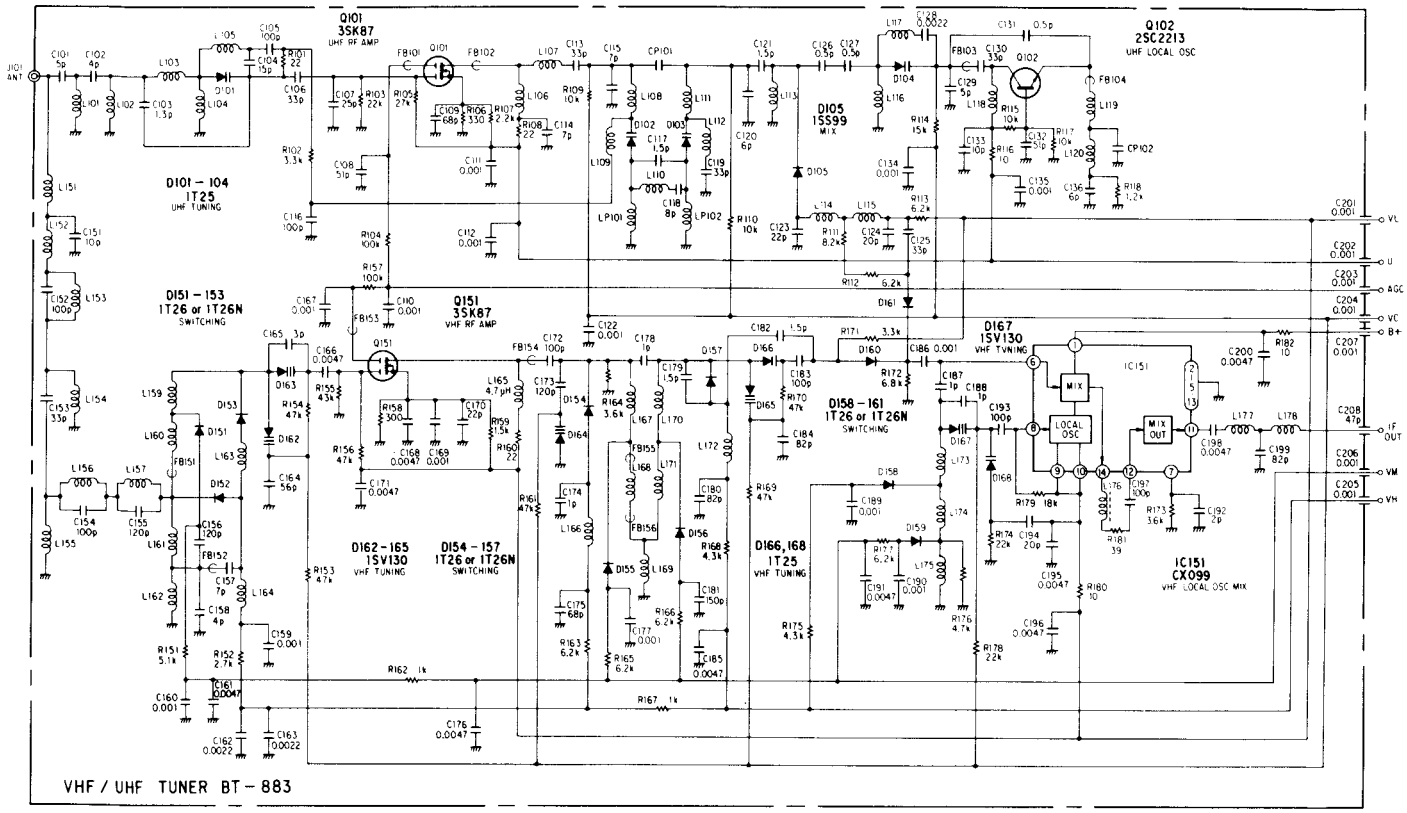


V19E



5-6. TUNER SCHEMATIC DIAGRAM

- **BT-883**



Note: Tuner reference numbers are not included in the Electrical Parts List.

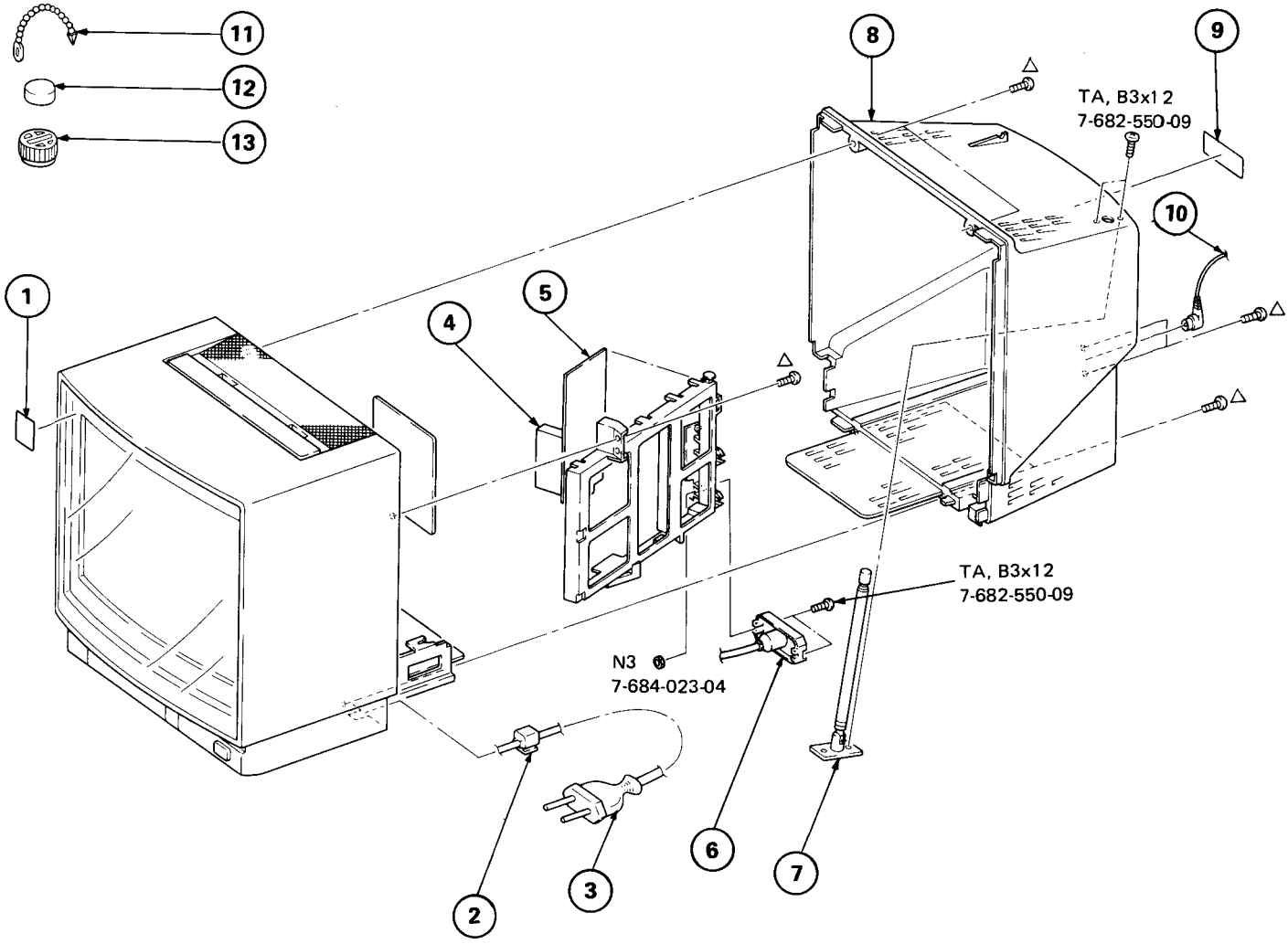
SECTION 6
EXPLODED VIEWS

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

(1) BACK COVER

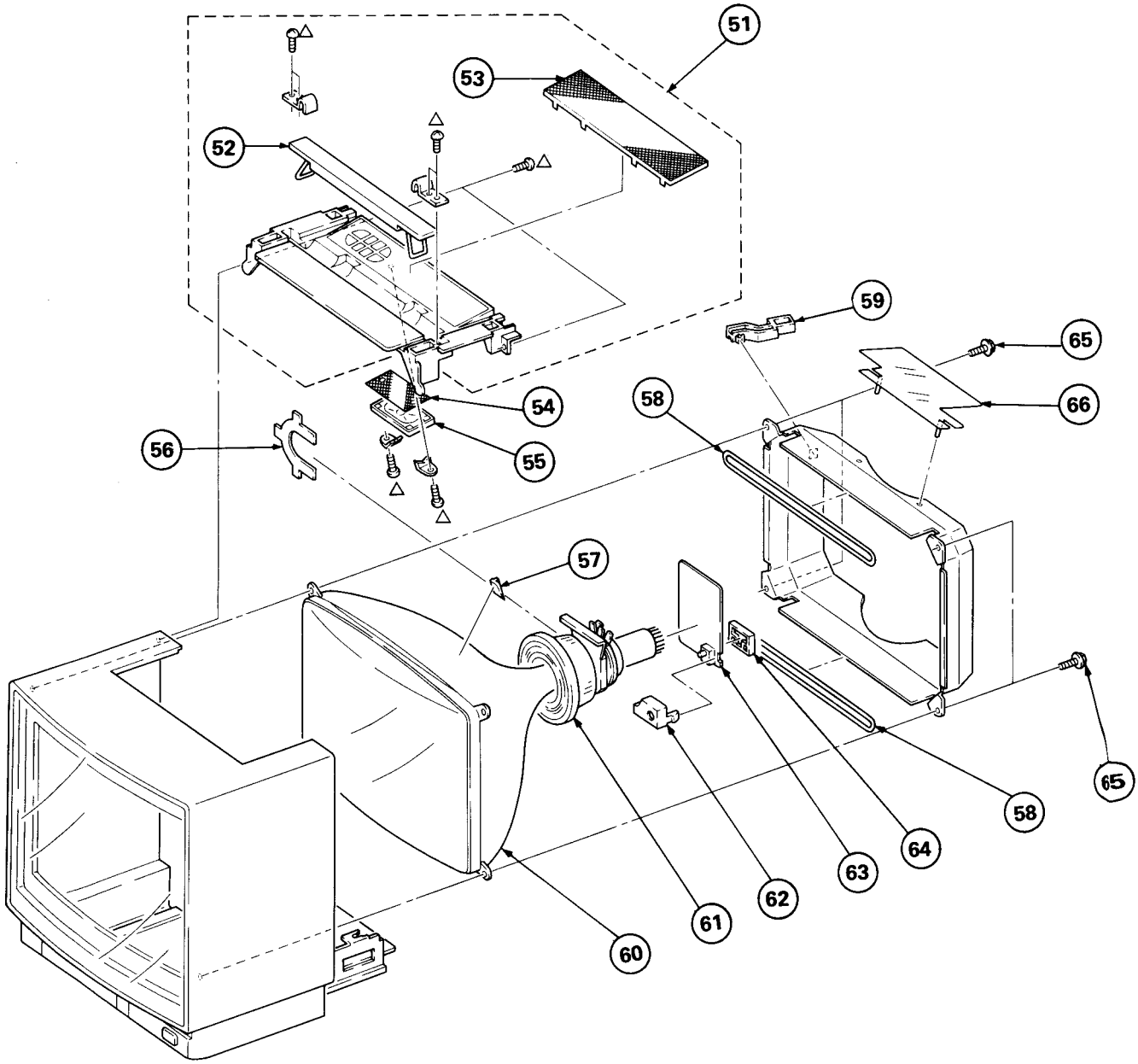
△: TA, BV4x16 7-685-663-71



No.	Part No.	Description	Remark
1	3-703-705-01	STICKER, SONY SYMBOL (30)	
2	⚠4-022-115-00	HOLDER, AC CORD	
3	⚠1-551-908-31	CORD, POWER, EULO PLUG	
4	⚠1-463-421-21	TUNER, ET (BT-883)	
5	♦:A-1355-081-A	S1 BOARD, COMPLETE	
6	⚠1-556-983-31	CONNECTOR, COAXIAL ANTENNA	
7	1-501-152-00	ROD ANTENNA,TYPE B	
8	4-368-132-11	COVER, BACK	
9	♦:4-368-158-01	LABEL, MODEL NUMBER	
10	♦:1-556-565-21	CABLE (PAL.PIN)	
11	4-308-870-00	CLIP, LEAD; WIRE	
12	1-452-032-00	MAGNET, DISK; 10MMφ	
13	1-452-094-00	MAGNET, ROTATABLE DISK; 15MMφ	

(2) PICTURE TUBE

△: TA, BV4x16 7-685-663-71



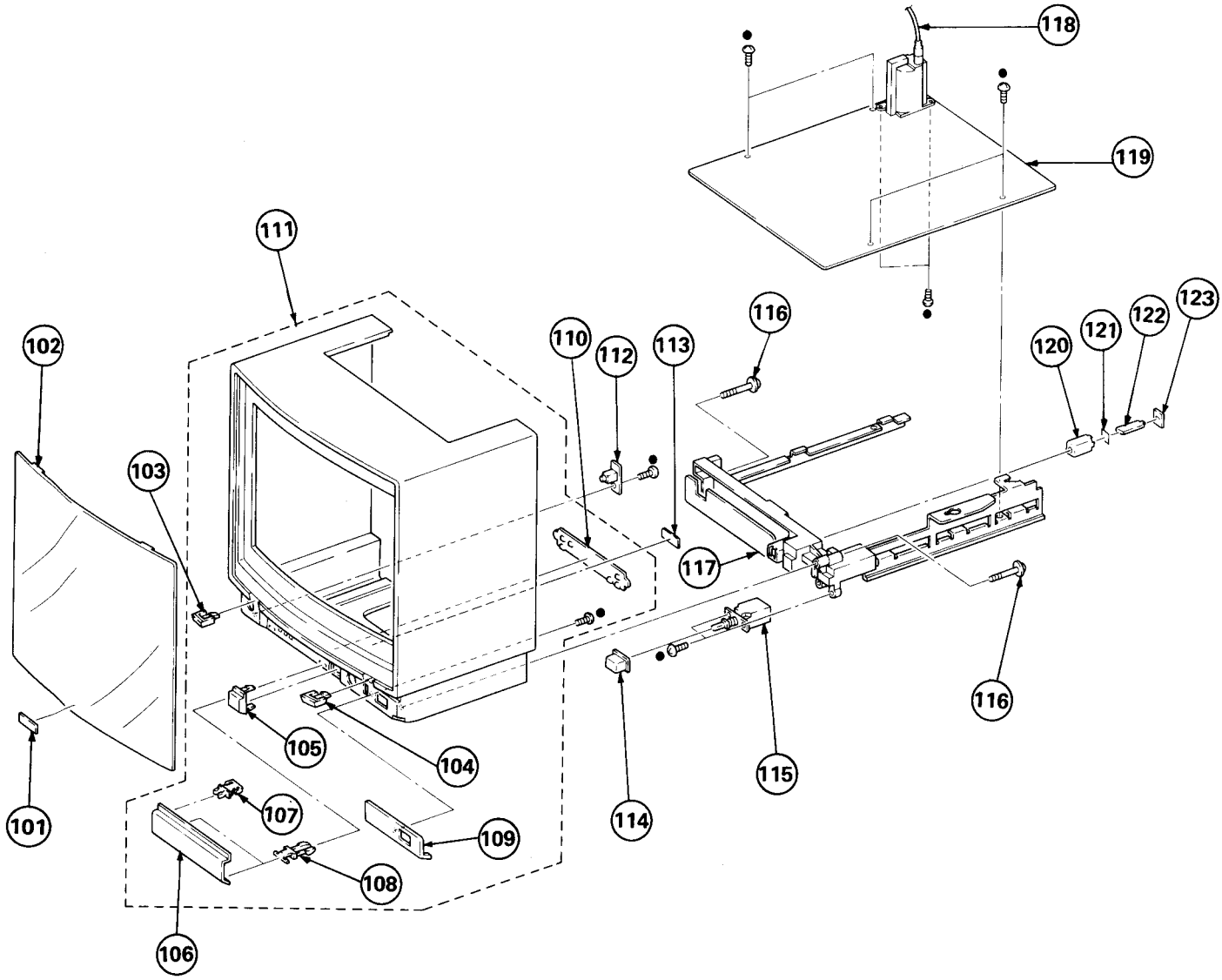
No.	Part No.	Description	Remark
51	X-4368-108-1	PLATE ASSY, TOP	52, 53
52	X-4368-110-1	HANDLE ASSY	
53	4-368-127-21	PLATE, ORNAMENTAL, SPEAKER	
54	♦:4-368-112-00	SHEET, DUST PROTECTION	
55	1-503-239-00	SPEAKER	
56	1-452-277-00	MAGNET, BMC	
57	3-703-003-00	SPACER, DY	
58	⚠1-426-145-00	COIL DEGAUSSING	

No.	Part No.	Description	Remark
59	♦:4-346-339-00	HOLDER, HV CABLE	
60	⚠8-735-550-05	CRT (A34JBU00X)	
61	⚠1-451-230-00	DEFLECTION YOKE (SY-125)	
62	♦:4-365-803-00	COVER (MAIN), CV CONTROL	
63	♦:A-1330-478-A	C BOARD, COMPLETE	
64	♦:4-365-804-00	COVER (REAR LID), CV CONTROL	
65	4-365-808-00	SCREW (5), TAPPING	
66	♦:4-368-138-00	INSULATOR	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

(3) BEZEL ASSY

●: TA, BV3x12 7-685-648-71



No.	Part No.	Description	Remark
101	♦:X-3701-079-0	EMBLEM (SMALL) ASSY, SONY	
102	4-368-129-00	FILTER	
103	4-368-103-21	STOPPER (LEFT), FILTER	
104	4-368-104-21	STOPPER (RIGHT), FILTER	
105	♦:4-368-118-00	FILTER, RAY CATCHER	
106	4-368-117-21	DOOR	
107	4-352-034-00	CATCHER, PUSH	
108	4-334-917-00	SHAFT	
109	4-368-162-01	COVER, TERMINAL	
110	4-368-155-01	BUTTON (EC), MULTI	
111	X-4368-109-1	BEZEL ASSY	103-110
112	♦:1-611-285-11	Z BOARD	
113	♦:1-611-284-11	L BOARD	
114	4-368-105-00	BUTTON, POWER	
115	⚠1-553-225-00	SWITCH, PUSH	
116	4-319-520-00	SCREW, SPECIAL (+PW4X30)	
117	♦:1-611-281-11	H1 BOARD	
118	⚠1-439-294-21	TRANSFORMER ASSY, FLYBACK	
119	♦:A-1295-840-A	A BOARD, COMPLETE	
120	♦:4-432-117-00	CASE, SHIELD (MAIN), R	
121	♦:4-333-624-00	FILM (N), SPECIAL	
122	♦:1-606-794-00	N BOARD	
123	♦:4-342-118-00	LID, SHIELD CASE, R	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

SECTION 7
ELECTRICAL PARTS LIST

A

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

CAPACITORS
- MF : μF, PF : μμF

RESISTORS
- All resistors are in ohms
- F : nonflammable

COILS
- MMH : mH, UH : μH

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description	Remark
	♦:A-1295-840-A	A BOARD, COMPLETE **********	
	4-303-483-00	HEAD, WASHER, TAPPING SCREW	
	♦:4-363-404-00	HOLDER, IC	
	4-363-414-00	SPACER, MICA	
	♦:4-370-012-00	HOLDER (REG OUT), TRANSISTOR	
		CONNECTOR	
A1	♦:1-506-349-21	3P PLUG (L)	
A2	♦:1-508-786-00	2P PLUG (M)	
A3	♦:1-564-038-00	CONNECTOR PLUG, DY (MINI) 6P	
A4	♦:1-508-765-00	3P PLUG (M)	
A5	♦:1-560-126-00	PLUG, CONNECTOR (2.5MM PITCH)	
A8	♦:1-560-128-00	PLUG, CONNECTOR (2.5MM PITCH)	
A10	♦:1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
A11	♦:1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
A12	♦:1-560-127-00	PLUG, CONNECTOR (2.5MM) 7P	
A13	♦:1-560-129-00	PLUG, CONNECTOR (2.5MM) 9P	
A14	♦:1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	
A15	♦:1-560-127-00	PLUG, CONNECTOR (2.5MM PITCH)	
A16	♦:1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	
A17	♦:1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)	
A18	♦:1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	
A19	♦:1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	
A20	♦:1-508-784-00	1P PLUG	
A21	♦:1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
A22	♦:1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
A23	♦:1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
A24	♦:1-508-786-00	2P PLUG (M)	
A25	♦:1-508-765-00	3P PLUG (M)	
		CAPACITOR	
C001	1-123-380-00	ELECT 1MF 20% 50V	
C002	1-123-306-00	ELECT 47MF 20% 10V	
C003	1-123-356-00	ELECT 10MF 20% 16V	
C004	1-123-306-00	ELECT 47MF 20% 10V	
C005	1-123-333-00	ELECT 100MF 20% 16V	
C006	1-102-516-00	CERAMIC 27PF 5% 50V	
C007	1-123-380-00	ELECT 1MF 20% 50V	
C008	1-102-824-00	CERAMIC 470PF 5% 50V	
C010	1-123-381-00	ELECT 2.2MF 20% 50V	
C011	1-102-973-00	CERAMIC 100PF 5% 50V	
C012	1-102-973-00	CERAMIC 100PF 5% 50V	
C013	1-130-632-00	FILM 0.1MF 5% 50V	
C014	1-102-973-00	CERAMIC 100PF 5% 50V	
C015	1-123-356-00	ELECT 10MF 20% 50V	
C016	1-123-380-00	ELECT 1MF 20% 50V	
C017	1-123-380-00	ELECT 1MF 20% 50V	
C018	1-123-381-00	ELECT 2.2MF 20% 50V	
C019	1-101-005-00	CERAMIC 0.022MF 50V	
C020	1-123-381-00	ELECT 2.2MF 20% 50V	
C021	1-102-963-00	CERAMIC 33PF 5% 50V	
C022	1-123-380-00	ELECT 1MF 20% 50V	
C023	1-123-354-00	ELECT 3.3MF 20% 50V	
C024	1-102-119-00	CERAMIC 0.0015MF 10% 50V	
C026	1-102-125-00	CERAMIC 0.0047MF 10% 50V	
C027	1-123-356-00	ELECT 10MF 20% 16V	
C028	1-102-973-00	CERAMIC 100PF 5% 50V	
C029	1-102-973-00	CERAMIC 100PF 5% 50V	
C030	1-101-004-00	CERAMIC 0.01MF 50V	
C031	1-101-004-00	CERAMIC 0.01MF 50V	
C032	1-102-973-00	CERAMIC 100PF 5% 50V	
C033	1-108-587-00	MYLAR 0.022MF 5% 50V	
C034	1-102-121-00	CERAMIC 0.0022MF 10% 50V	
C035	1-161-328-00	CERAMIC 0.0047MF 50V	
C036	1-102-978-00	CERAMIC 220PF 5% 50V	
C251	1-123-318-00	ELECT 33MF 20% 16V	
C252	1-123-364-00	ELECT 1000MF 20% 50V	
C253	1-123-322-00	ELECT 330MF 20% 16V	
C254	1-108-389-00	MYLAR 0.1MF 10% 100V	
C255	1-123-324-00	ELECT 1000MF 20% 16V	
C256	1-102-973-00	CERAMIC 100PF 5% 50V	
C257	1-123-333-00	ELECT 100MF 20% 16V	
C258	1-123-328-00	ELECT 4.7MF 20% 25V	
C259	1-123-356-00	ELECT 10MF 20% 16V	
C301	1-123-356-00	ELECT 10MF 20% 16V	
C302	1-101-004-00	CERAMIC 0.01MF 50V	
C303	1-123-380-00	ELECT 1MF 20% 50V	
C304	1-130-636-00	FILM 0.22MF 5% 50V	
C305	1-123-380-00	ELECT 1MF 20% 50V	
C306	1-123-354-00	ELECT 3.3MF 20% 50V	
C307	1-102-129-00	CERAMIC 0.01MF 10% 50V	
C308	1-123-380-00	ELECT 1MF 20% 50V	
C309	1-108-383-00	MYLAR 0.033MF 10% 100V	
C310	1-123-354-00	ELECT 3.3MF 20% 50V	
C313	1-123-379-00	ELECT 0.47MF 20% 50V	
C314	1-131-371-00	TANTALUM 10MF 20% 16V	
C315	1-101-880-00	CERAMIC 47PF 5% 50V	
C316	1-123-354-00	ELECT 3.3MF 20% 50V	
C317	1-102-852-00	CERAMIC 47PF 5% 50V	
C325	1-102-850-00	CERAMIC 56PF 5% 50V	
C326	1-123-379-00	ELECT 0.47MF 20% 50V	
C327	1-123-356-00	ELECT 10MF 20% 16V	
C328	1-102-887-00	CERAMIC 47PF 5% 50V	
C329	1-108-385-00	MYLAR 0.047MF 10% 100V	
C330	1-108-385-00	MYLAR 0.047MF 10% 100V	
C331	1-102-852-00	CERAMIC 47PF 5% 50V	
C332	1-102-513-00	CERAMIC 18PF 5% 50V	
C333	1-101-880-00	CERAMIC 47PF 5% 50V	
C334	1-102-129-00	CERAMIC 0.01MF 10% 50V	
C335	1-102-129-00	CERAMIC 0.01MF 10% 50V	
C336	1-102-947-00	CERAMIC 10PF 5% 50V	
C337	1-102-947-00	CERAMIC 10PF 5% 50V	
C338	1-102-947-00	CERAMIC 10PF 5% 50V	

Ref.No.	Part No.	Description			Remark
C339	1-102-129-00	CERAMIC	0.01MF	10%	50V
C340	1-108-561-00	MYLAR	0.0018MF	5%	50V
C341	1-102-523-00	CERAMIC	56PF	5%	50V
C342	1-123-356-00	ELECT	10MF	20%	16V
C343	1-123-356-00	ELECT	10MF	20%	16V
C344	1-102-978-00	CERAMIC	220PF	5%	50V
C345	1-108-367-00	MYLAR	0.0015MF	10%	100V
C346	1-102-518-00	CERAMIC	33PF	5%	50V
C348	1-123-333-00	ELECT	100MF	20%	16V
C501	1-123-381-00	ELECT	2.2MF	20%	50V
C502	1-123-321-00	ELECT	220MF	20%	16V
C503	1-108-367-00	MYLAR	0.0015MF	10%	100V
C504	1-108-385-00	MYLAR	0.047MF	10%	100V
C505	1-108-384-00	MYLAR	0.039MF	10%	100V
C506	1-123-380-00	ELECT	1MF	20%	50V
C507	1-123-380-00	ELECT	1MF	20%	50V
C508	1-130-640-00	FILM	0.47MF	5%	50V
C509	1-123-356-00	ELECT	10MF	20%	16V
C511	1-108-837-00	MYLAR	0.01MF	5%	50V
C512	1-108-595-00	MYLAR	0.047MF	5%	50V
C513	1-108-379-00	MYLAR	0.015MF	10%	100V
C514	1-108-377-00	MYLAR	0.01MF	10%	100V
C515	1-108-385-00	MYLAR	0.047MF	10%	100V
C516	1-102-228-00	CERAMIC	470PF	10%	500V
C517	1-123-360-00	ELECT	100MF	20%	50V
C518	1-102-228-00	CERAMIC	470PF	10%	500V
C519	1-108-377-00	MYLAR	0.01MF	10%	100V
C520	1-102-115-00	CERAMIC	560PF	10%	50V
C521	1-108-381-00	MYLAR	0.022MF	10%	100V
C522	1-102-989-00	CERAMIC	68PF	10%	500V
C523	1-123-380-00	ELECT	1MF	20%	50V
C524	1-108-381-00	MYLAR	0.022MF	10%	100V
C525	1-108-230-00	MYLAR	0.0022MF	10%	50V
C526	1-130-024-00	FILM	0.0033MF	5%	50V
C527	1-123-380-00	ELECT	1MF	20%	50V
C528	1-123-381-00	ELECT	2.2MF	20%	50V
C529	1-123-321-00	ELECT	220MF	20%	16V
C530	1-124-190-00	ELECT	680MF	10%	35V
C531	1-123-334-00	ELECT	220MF	20%	25V
C532	1-102-038-00	CERAMIC	0.001MF		500V
C533	1-121-999-00	ELECT	10MF		160V
C534	1-121-999-00	ELECT	10MF		160V
C535	1-108-425-00	MYLAR	0.022MF	10%	200V
C536	1-102-038-00	CERAMIC	0.001MF		500V
C537	1-123-228-00	ELECT	1MF	20%	50V
C538	1-130-640-00	FILM	0.47MF	5%	50V
C539	1-102-030-00	CERAMIC	330PF	10%	500V
C540	1-102-327-00	CERAMIC	330PF	15%	1.5KV
C541	⚠1-136-061-00	FILM	0.0078MF	3%	2KV
C542	1-123-024-00	ELECT	33MF		160V
C543	1-102-002-00	CERAMIC	680PF	10%	500V
C544	1-102-212-00	CERAMIC	820PF	10%	500V
C545	1-130-684-00	FILM	0.33MF	5%	200V

Ref.No.	Part No.	Description			Remark
C546	1-108-379-00	MYLAR	0.015MF	10%	100V
C547	1-136-060-00	FILM	0.047MF	5%	400V
C548	1-102-223-00	CERAMIC	0.0047MF	10%	2KV
C549	1-123-380-00	ELECT	1MF	20%	50V
C550	1-108-381-00	MYLAR	0.022MF	10%	100V
C551	1-108-377-00	MYLAR	0.01MF	10%	100V
C552	1-108-621-11	MYLAR	0.012MF	10%	100V
C553	1-123-349-00	ELECT	1000MF	20%	35V
C554	1-102-038-00	CERAMIC	0.001MF		500V
C555	1-102-038-00	CERAMIC	0.001MF		500V
C556	1-123-005-00	ELECT	22MF		250V
C557	1-123-323-00	ELECT	470MF	20%	16V
C558	1-108-608-00	FILM	0.001MF		200V
C601	1-123-021-00	ELECT	0.47MF	30%	50V
C602	1-123-381-00	ELECT	2.2MF	20%	50V
C603	1-123-354-00	ELECT	3.3MF	20%	50V
C604	1-108-381-00	MYLAR	0.022MF	10%	100V
C605	1-108-417-00	MYLAR	0.0047MF	10%	200V
C606	1-102-030-00	CERAMIC	330PF	10%	500V
C607	1-102-973-00	CERAMIC	100PF	5%	50V
C608	⚠1-108-745-00	MYLAR	0.22MF	20%	300V
C609	⚠1-108-745-00	MYLAR	0.22MF	20%	300V
C610	1-123-024-00	ELECT	33MF		160V
C611	1-108-563-00	MYLAR	0.0022MF	5%	50V
C612	1-101-810-00	CERAMIC	100PF	5%	500V
C614	1-102-030-00	CERAMIC	330PF	10%	500V
C615	1-102-030-00	CERAMIC	330PF	10%	500V
C616	1-123-324-00	ELECT	1000MF	20%	16V
C617	⚠1-161-964-00	CERAMIC	0.0047MF		250V
C618	⚠1-161-964-00	CERAMIC	0.0047MF		250V
C619	1-125-318-00	ELECT(BLOCK)	220MF	20%	400V
C621	1-123-379-00	ELECT	0.47MF	20%	50V
C622	1-123-335-00	ELECT	330MF	20%	25V
C623	1-161-731-00	CERAMIC	0.001MF	10%	2KV
C624	1-102-050-00	CERAMIC	0.01MF		500V
C625	1-102-038-00	CERAMIC	0.001MF		500V
C626	1-123-335-00	ELECT	330MF		25V
C627	1-161-946-00	CERAMIC	0.0047MF		250V
C628	1-161-830-00	CERAMIC	0.0047MF		500V
C637	1-102-038-00	CERAMIC	0.001MF		500V
C638	1-108-634-00	FILM	0.047MF		100V

FILTER

CF001	1-527-790-00	OSCILLATOR, CERAMIC

DIODE

D001	8-719-911-19	DIODE 1SS119
D002	8-719-911-19	DIODE 1SS119
D003	8-719-101-35	DIODE RD3.0E-L2
D004	8-719-911-19	DIODE 1SS119
D005	8-719-911-19	DIODE 1SS119
D006	8-719-911-19	DIODE 1SS119
D009	8-719-911-19	DIODE 1SS119
D010	8-719-100-61	DIODE RD11E-B2
D011	8-719-101-02	DIODE RD30E-B4
D012	8-759-157-40	IC UPC574J

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

A

Ref.No.	Part No.	Description	Remark
D014	8-719-911-19	DIODE 1SS119	
D015	8-719-911-19	DIODE 1SS119	
D016	8-719-100-35	DIODE RD5.6E-B2	
D018	8-719-911-19	DIODE 1SS119	
D019	8-719-911-19	DIODE 1SS119	
D023	8-719-911-19	DIODE 1SS119	
D203	8-719-911-19	DIODE 1SS119	
D301	8-719-911-19	DIODE 1SS119	
D302	8-719-911-19	DIODE 1SS119	
D305	8-719-100-22	DIODE RD4.3E-B1	
D306	8-719-911-19	DIODE 1SS119	
D307	8-719-911-19	DIODE 1SS119	
D308	8-719-911-19	DIODE 1SS119	
D501	8-719-911-19	DIODE 1SS119	
D502	8-719-924-06	DIODE ERC24-06S	
D503	8-719-924-06	DIODE ERC24-06S	
D504	8-719-911-19	DIODE 1SS119	
D505	8-719-901-93	DIODE V19E	
D506	8-719-200-02	DIODE 10E2	
D507	8-719-924-06	DIODE ERC24-06S	
D508	8-719-920-04	DIODE ERB12-04RK	
D509	8-719-920-04	DIODE ERB12-04RK	
D510	8-719-920-04	DIODE ERB12-04RK	
D511	8-719-300-65	DIODE ES1F	
D512	8-719-931-30	DIODE EQB01-30	
D514	8-719-931-05	DIODE EQB01-05	
D601	8-719-911-19	DIODE 1SS119	
D602	8-719-102-74	DIODE RD6.2E-N2	
D603	8-719-920-04	DIODE ERB12-04RK	
D604	8-719-901-93	DIODE V19E	
D605	8-719-982-04	DIODE ERB81-004	
D606	8-719-503-06	DIODE S3WB60Z	
D607	8-719-925-06	DIODE ERC25-06S	
D608	8-719-911-19	DIODE 1SS119	
D609	8-719-160-23	DIODE RD5.1F-B2	
D610	8-719-911-19	DIODE 1SS119	
		DELAY LINE	
DL301	1-415-122-31	DELAY LINE	
		CONNECTOR	
F7	♣:1-560-126-00	PLUG, CONNECTOR (2.5MM PITCH)	
		FUSE	
F601	⚠ 1-532-350-00	FUSE, TIME-LAG 4A	
	1-533-087-00	HOLDER, FUSE; F601	
		IC	
IC001	8-759-600-92	IC M58657P	
IC002	8-759-600-62	IC M50143-002P	
IC003	8-759-600-89	IC CX523-013P	
IC203	8-759-157-52	IC UPC575C	
IC301	8-759-113-65	IC UPC1365C	
IC501	8-759-100-60	IC UPC1377C	
IC502	8-759-113-78	IC UPC1378H-L	
IC503	8-759-700-06	IC NJM7812B	
	♣:4-323-833-00	HEAT SINK, PIN OUT; IC503	
IC601	8-759-100-75	IC UPC1394C	
		COIL	
L001	1-408-411-00	MICRO INDUCTOR 15UH	
L002	1-408-428-00	MICRO INDUCTOR 390UH	
L003	1-408-403-00	MICRO INDUCTOR 3.3UH	
L004	1-407-179-00	MICRO INDUCTOR 1.2UH	
L005	1-408-605-00	MICRO INDUCTOR 15UH	
L301	1-408-409-00	MICRO INDUCTOR 10UH	
L302	1-408-415-00	MICRO INDUCTOR 33UH	
L303	1-408-942-00	MICRO INDUCTOR 3.3MMH	
L304	1-407-501-00	MICRO INDUCTOR 5.6MMH	
L305	1-408-408-00	MICRO INDUCTOR 8.2UH	
L306	1-408-414-00	MICRO INDUCTOR 27UH	
L503	1-408-349-00	COIL, CHOKE 1UH	
L504	1-407-496-00	MICRO INDUCTOR 2.2MMH	
L505	1-407-496-00	MICRO INDUCTOR 2.2MMH	
L506	1-407-366-00	RF CHOKE COIL 1.7UH	
L507	1-459-215-00	CORE COIL 120UH	
L508	1-459-404-00	COIL (WITH CORE) 24UH	
L510	1-459-348-00	COIL, VAR, FERRITE (HWC)	
L601	1-407-365-00	COIL, CHOKE (HIGH FREQUENCY) 0.7UH	
L602	1-408-300-00	MICRO INDUCTOR 6.8UH	
L603	1-407-365-00	COIL, CHOKE (HIGH FREQUENCY) 0.7UH	
		CONNECTOR	
M12	♣:1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH) 4P	
		THERMISTOR	
PTH601	1-800-820-00	THERMISTOR, POWER	
		TRANSISTOR	
Q004	8-729-245-83	TRANSISTOR 2SC2458	
Q005	8-729-245-83	TRANSISTOR 2SC2458	
Q006	8-729-204-83	TRANSISTOR 2SA1048-GR	
Q007	8-729-245-83	TRANSISTOR 2SC2458	
Q008	8-729-245-83	TRANSISTOR 2SC2458	
Q009	8-729-245-83	TRANSISTOR 2SC2458	
Q010	8-724-375-01	TRANSISTOR 2SC403C	
Q205	8-729-245-83	TRANSISTOR 2SC2458	
Q252	8-729-245-83	TRANSISTOR 2SC2458	
Q301	8-729-245-83	TRANSISTOR 2SC2458	
Q302	8-729-245-83	TRANSISTOR 2SC2458	
Q303	8-729-245-83	TRANSISTOR 2SC2458	
Q304	8-729-245-83	TRANSISTOR 2SC2458	
Q305	8-729-204-83	TRANSISTOR 2SA1048-GR	
Q306	8-729-245-83	TRANSISTOR 2SC2458	
Q307	8-729-245-83	TRANSISTOR 2SC2458	
Q308	8-729-245-83	TRANSISTOR 2SC2458	
Q309	8-729-245-83	TRANSISTOR 2SC2458	
Q501	8-729-245-83	TRANSISTOR 2SC2458	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description				Remark
Q502	8-729-801-71	TRANSISTOR 2SD1396				
Q503	8-729-168-82	TRANSISTOR 2SC2688				
Q504	8-729-245-83	TRANSISTOR 2SC2458				
Q505	8-729-177-43	TRANSISTOR 2SD774				
Q601	8-729-195-82	TRANSISTOR 2SC2958				
Q602	8-729-163-93	TRANSISTOR 2SA639S				
Q603	8-729-801-69	TRANSISTOR 2SC3153				
Q605	8-729-204-83	TRANSISTOR 2SA1048-GR				
Q606	8-729-245-83	TRANSISTOR 2SC2458				
		RESISTOR				
R005	1-247-835-00	CARBON	1.5K	5%	1/6W	
R006	1-247-863-00	CARBON	22K	5%	1/6W	
R007	1-247-831-00	CARBON	1K	5%	1/6W	
R008	1-247-875-00	CARBON	68K	5%	1/6W	
R010	1-247-831-00	CARBON	1K	5%	1/6W	
R011	1-247-863-00	CARBON	22K	5%	1/6W	
R012	1-247-863-00	CARBON	22K	5%	1/6W	
R013	1-247-831-00	CARBON	1K	5%	1/6W	
R014	1-247-831-00	CARBON	1K	5%	1/6W	
R015	1-247-831-00	CARBON	1K	5%	1/6W	
R016	1-247-863-00	CARBON	22K	5%	1/6W	
R017	1-247-831-00	CARBON	1K	5%	1/6W	
R018	1-247-847-00	CARBON	4.7K	5%	1/6W	
R019	1-247-831-00	CARBON	1K	5%	1/6W	
R020	1-247-831-00	CARBON	1K	5%	1/6W	
R021	1-247-831-00	CARBON	1K	5%	1/6W	
R022	1-247-831-00	CARBON	1K	5%	1/6W	
R023	1-247-831-00	CARBON	1K	5%	1/6W	
R024	1-247-831-00	CARBON	1K	5%	1/6W	
R025	1-247-814-00	CARBON	200	5%	1/6W	
R026	1-247-814-00	CARBON	200	5%	1/6W	
R029	1-247-855-00	CARBON	10K	5%	1/6W	
R030	1-247-847-00	CARBON	4.7K	5%	1/6W	
R031	1-247-867-00	CARBON	33K	5%	1/6W	
R032	1-247-867-00	CARBON	33K	5%	1/6W	
R033	1-247-855-00	CARBON	10K	5%	1/6W	
R034	⚠1-246-991-00	CARBON	150	5%	1/8W	F
R035	1-247-871-00	CARBON	47K	5%	1/6W	
R036	1-247-863-00	CARBON	22K	5%	1/6W	
R037	1-247-831-00	CARBON	1K	5%	1/6W	
R038	1-247-855-00	CARBON	10K	5%	1/6W	
R039	1-247-863-00	CARBON	22K	5%	1/6W	
R040	1-247-863-00	CARBON	22K	5%	1/6W	
R041	1-247-863-00	CARBON	22K	5%	1/6W	
R042	1-247-863-00	CARBON	22K	5%	1/6W	
R043	1-247-863-00	CARBON	22K	5%	1/6W	
R044	1-247-865-00	CARBON	27K	5%	1/6W	
R045	1-247-861-00	CARBON	18K	5%	1/6W	
R046	1-247-865-00	CARBON	27K	5%	1/6W	
R047	1-247-855-00	CARBON	10K	5%	1/6W	
R048	1-247-861-00	CARBON	18K	5%	1/6W	
R049	1-247-845-00	CARBON	3.9K	5%	1/6W	

Ref.No.	Part No.	Description				Remark
R050	1-247-865-00	CARBON	27K	5%	1/6W	
R051	1-247-863-00	CARBON	22K	5%	1/6W	
R052	1-247-877-00	CARBON	82K	5%	1/6W	
R053	1-247-831-00	CARBON	1K	5%	1/6W	
R054	1-247-879-00	CARBON	100K	5%	1/6W	
R055	1-247-872-00	CARBON	51K	5%	1/6W	
R056	1-247-867-00	CARBON	33K	5%	1/6W	
R057	1-247-859-00	CARBON	15K	5%	1/6W	
R059	1-206-692-00	METAL OXIDE	15K	5%	2W	F
R060	1-247-863-00	CARBON	22K	5%	1/6W	
R062	1-247-861-00	CARBON	18K	5%	1/6W	
R063	1-247-861-00	CARBON	18K	5%	1/6W	
R064	1-247-807-00	CARBON	100	5%	1/6W	
R069	1-247-831-00	CARBON	1K	5%	1/6W	
R070	1-246-513-00	CARBON	47K	5%	1/4W	
R071	1-246-537-00	CARBON	470K	5%	1/4W	
R240	1-247-843-00	CARBON	3.3K	5%	1/6W	
R241	1-247-877-00	CARBON	82K	5%	1/6W	
R251	1-244-865-51	CARBON	470	5%	1/2W	
R252	1-247-835-00	CARBON	1.5K	5%	1/6W	
R253	1-247-883-00	CARBON	150K	5%	1/6W	
R254	1-247-871-00	CARBON	47K	5%	1/6W	
R255	1-247-881-00	CARBON	120K	5%	1/6W	
R256	1-246-497-00	CARBON	10K	5%	1/4W	
R257	1-247-863-00	CARBON	22K	5%	1/6W	
R301	1-247-831-00	CARBON	1K	5%	1/6W	
R302	1-247-817-00	CARBON	270	5%	1/6W	
R303	1-247-835-00	CARBON	1.5K	5%	1/6W	
R304	1-247-835-00	CARBON	1.5K	5%	1/6W	
R305	1-247-843-00	CARBON	3.3K	5%	1/6W	
R306	1-247-861-00	CARBON	18K	5%	1/6W	
R307	1-247-857-00	CARBON	12K	5%	1/6W	
R310	1-247-855-00	CARBON	10K	5%	1/6W	
R311	1-247-863-00	CARBON	22K	5%	1/6W	
R312	1-247-857-00	CARBON	12K	5%	1/6W	
R313	1-246-465-00	CARBON	470	5%	1/4W	
R314	1-247-863-00	CARBON	22K	5%	1/6W	
R315	1-247-843-00	CARBON	3.3K	5%	1/6W	
R317	1-247-835-00	CARBON	1.5K	5%	1/6W	
R318	1-247-887-00	CARBON	220K	5%	1/6W	
R319	1-247-877-00	CARBON	82K	5%	1/6W	
R320	1-247-831-00	CARBON	1K	5%	1/6W	
R321	1-247-831-00	CARBON	1K	5%	1/6W	
R322	1-247-825-00	CARBON	560	5%	1/6W	
R323	1-247-807-00	CARBON	100	5%	1/6W	
R324	1-247-807-00	CARBON	100	5%	1/6W	
R325	1-247-885-00	CARBON	180K	5%	1/6W	
R326	1-247-849-00	CARBON	5.6K	5%	1/6W	
R327	1-247-839-00	CARBON	2.2K	5%	1/6W	
R328	1-247-831-00	CARBON	1K	5%	1/6W	
R329	1-247-829-00	CARBON	820	5%	1/6W	
R330	1-247-865-00	CARBON	27K	5%	1/6W	
R331	1-247-865-00	CARBON	27K	5%	1/6W	
R332	1-247-829-00	CARBON	820	5%	1/6W	
R333	1-247-831-00	CARBON	1K	5%	1/6W	

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A

Ref.No.	Part No.	Description				Remark
R334	1-247-827-00	CARBON	680	5%	1/6W	
R335	1-247-819-00	CARBON	330	5%	1/6W	
R336	1-247-819-00	CARBON	330	5%	1/6W	
R337	1-247-819-00	CARBON	330	5%	1/6W	
R341	1-247-831-00	CARBON	1K	5%	1/6W	
R342	1-247-850-00	CARBON	6.2K	5%	1/6W	
R343	1-247-815-00	CARBON	220	5%	1/6W	
R344	1-247-807-00	CARBON	100	5%	1/6W	
R345	1-247-855-00	CARBON	10K	5%	1/6W	
R346	1-247-855-00	CARBON	10K	5%	1/6W	
R347	1-247-815-00	CARBON	220	5%	1/6W	
R348	1-247-821-00	CARBON	390	5%	1/6W	
R349	1-247-815-00	CARBON	220	5%	1/6W	
R352	1-247-831-00	CARBON	1K	5%	1/6W	
R353	1-247-831-00	CARBON	1K	5%	1/6W	
R354	1-247-828-00	CARBON	750	5%	1/6W	
R355	1-247-831-00	CARBON	1K	5%	1/6W	
R356	1-247-851-00	CARBON	6.8K	5%	1/6W	
R357	1-247-851-00	CARBON	6.8K	5%	1/6W	
R358	1-247-831-00	CARBON	1K	5%	1/6W	
R359	1-247-835-00	CARBON	1.5K	5%	1/6W	
R360	1-247-831-00	CARBON	1K	5%	1/6W	
R362	1-247-828-00	CARBON	750	5%	1/6W	
R501	1-247-817-00	CARBON	270	5%	1/6W	
R502	1-247-817-00	CARBON	270	5%	1/6W	
R503	1-247-845-00	CARBON	3.9K	5%	1/6W	
R504	1-247-841-00	CARBON	2.7K	5%	1/6W	
R505	1-247-873-00	CARBON	56K	5%	1/6W	
R506	1-214-763-00	METAL	27K	1%	1/4W	
R507	1-202-847-00	SOLID	560K		1/2W	
R509	1-247-769-00	CARBON	2.7	5%	1/6W	
R510	1-214-771-00	METAL	56K	1%	1/4W	
R511	1-247-833-00	CARBON	1.2K	5%	1/6W	
R512	1-247-843-00	CARBON	3.3K	5%	1/6W	
R513	1-247-850-00	CARBON	6.2K	5%	1/6W	
R514	1-206-640-00	METAL OXIDE	100	5%	2W	F
R515	1-247-847-00	CARBON	4.7K	5%	1/6W	
R516	1-214-768-00	METAL	43K	1%	1/4W	
R517	1-247-829-00	CARBON	820	5%	1/6W	
R518	1-247-783-00	CARBON	10	5%	1/8W	F
R519	1-244-859-00	CARBON	270	5%	1/2W	
R520	1-247-847-00	CARBON	4.7K	5%	1/6W	
R521	1-247-855-00	CARBON	10K	5%	1/6W	
R522	1-247-877-00	CARBON	82K	5%	1/6W	
R523	1-247-843-00	CARBON	3.3K	5%	1/6W	
R524	1-247-868-00	CARBON	36K	5%	1/6W	
R525	1-247-857-00	CARBON	12K	5%	1/6W	
R526	1-247-829-00	CARBON	820	5%	1/6W	
R527	1-247-853-00	CARBON	8.2K	5%	1/6W	
R528	1-247-857-00	CARBON	12K	5%	1/6W	
R529	1-247-877-00	CARBON	82K	5%	1/6W	
R530	1-213-158-00	METAL OXIDE	18K	5%	1W	F
R531	1-246-469-00	CARBON	680	5%	1/4W	
R532	1-212-364-00	METAL OXIDE	2.2	5%	1W	F

Ref.No.	Part No.	Description				Remark
R534	1-206-745-00	METAL OXIDE	6.8K	5%	3W	F
R535	⚠1-246-994-00	CARBON	680	5%	1/8W	F
R536	⚠1-247-636-00	CARBON	0.47	5%	1/8W	F
R537	1-202-830-00	SOLID	10K		1/2W	
R538	⚠1-246-979-00	CARBON	1.2	5%	1/8W	F
R539	1-246-528-00	CARBON	200K	5%	1/4W	
R540	1-246-493-00	CARBON	6.8K	5%	1/4W	
R541	1-202-830-51	SOLID	10K		1/2W	
R542	1-247-871-00	CARBON	47K	5%	1/6W	
R543	1-247-847-00	CARBON	4.7K	5%	1/6W	
R544	1-247-809-00	CARBON	120	5%	1/6W	
R545	1-246-535-00	CARBON	390K	5%	1/4W	
R546	1-206-735-61	METAL OXIDE	2.7K	5%	3W	F
R547	1-247-827-00	CARBON	680	5%	1/6W	
R548	1-212-372-00	METAL OXIDE	10	5%	1W	F
R549	1-212-372-00	METAL OXIDE	10	5%	1W	F
R550	1-206-463-00	METAL OXIDE	10	5%	2W	F
R551	1-247-839-00	CARBON	2.2K	5%	1/8W	F
R552	1-247-863-00	CARBON	22K	5%	1/6W	
R553	1-213-139-00	METAL OXIDE	470	5%	1W	F
R554	⚠1-217-371-00	FUSIBLE	0.47	10%	1/4W	F
R555	1-247-845-00	CARBON	3.9K	5%	1/6W	
R556	1-212-372-00	METAL OXIDE	10	5%	1W	F
R557	1-246-988-00	CARBON	56	5%	1/8W	F
R558	1-247-867-00	CARBON	33K	5%	1/6W	
R559	1-213-130-00	METAL OXIDE	82	5%	1W	F
R560	1-247-849-00	CARBON	5.6K	5%	1/6W	
R561	⚠1-247-040-00	CARBON	1K	5%	1/8W	F
R562	1-202-826-00	SOLID	4.7K		1/2W	
R601	1-247-855-00	CARBON	10K	5%	1/6W	
R602	1-202-463-00	SOLID	2.2M	5%	1/4W	
R603	1-247-865-00	CARBON	27K	5%	1/6W	
R604	1-247-855-00	CARBON	10K	5%	1/6W	
R605	1-247-879-00	CARBON	100K	5%	1/6W	
R606	1-247-829-00	CARBON	820	5%	1/6W	
R607	1-247-825-00	CARBON	560	5%	1/6W	
R608	1-247-889-00	CARBON	270K	5%	1/6W	
R609	1-247-825-00	CARBON	560K	5%	1/6W	
R610	1-247-873-00	CARBON	56K	5%	1/6W	
R611	1-247-891-00	CARBON	330K	5%	1/6W	
R612	1-247-871-00	CARBON	47K	5%	1/6W	
R613	1-247-871-00	CARBON	47K	5%	1/6W	
R614	1-247-819-00	CARBON	330	5%	1/6W	
R615	1-214-597-00	METAL OXIDE	100K	5%	2W	F
R616	1-247-869-00	CARBON	39K	5%	1/6W	
R617	1-247-885-00	CARBON	180K	5%	1/6W	
R618	1-247-879-00	CARBON	100K	5%	1/6W	
R619	1-247-827-00	CARBON	680	5%	1/6W	
R620	1-213-159-00	METAL OXIDE	22K	5%	1W	F
R621	1-205-687-00	CEMENTED	54K	10%	7W	
R622	1-247-805-00	CARBON	82	5%	1/6W	
R623	⚠1-217-465-00	FUSIBLE	0.47	5%	1W	F

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Ref.No.	Part No.	Description				Remark
R624	⚠1-217-465-00	FUSIBLE	0.47	5%	1W	F
R625	1-247-831-00	CARBON	1K	5%	1/6W	
R626	1-217-193-00	WIREWOUND	0.27	10%	2W	F
R627	1-246-546-00	CARBON	8.2M	10%	1/2W	
R628	1-247-879-00	CARBON	100K	5%	1/6W	
R629	1-247-855-00	CARBON	10K	5%	1/8W	
R630	1-247-829-00	CARBON	820	5%	1/6W	
R631	1-247-840-00	CARBON	2.4K	5%	1/6W	
R632	1-247-855-00	CARBON	10K	5%	1/6W	
R633	1-247-873-00	CARBON	56K	5%	1/6W	
R634	1-247-871-00	CARBON	47K	5%	1/6W	
R636	1-212-974-00	FUSIBLE	47	5%	1/2W	F

VARIABLE RESISTOR

RV301	1-228-724-00	RES, ADJ, CERAMIC CARBON 10K
RV302	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K
RV303	1-228-720-00	RES, ADJ, CERAMIC CARBON 1K
RV304	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K
RV305	1-228-719-00	RES, ADJ, CERAMIC CARBON 470
RV501	1-228-717-00	RES, ADJ, CERAMIC CARBON 220
RV502	1-224-250-XX	RES, ADJ, METAL GLAZE 2.2K
RV503	1-228-160-11	RES, ADJ, METAL GLAZE 5K
RV504	1-223-102-00	RES, ADJ, WIREWOUND 120
RV601	1-228-721-00	RES, ADJ, CERAMIC CARBON 2.2K

SPARK GAP

SG501	1-519-063-XX	DISCHARGING GAP

TRANSFORMER

T251	⚠1-427-541-11	TRANSFORMER, OUTPUT
T301	1-426-121-00	DAT
T501	1-437-078-00	TRANSFORMER, DRIVE HDT
T502	1-421-268-00	H.PCT
T503	⚠1-439-294-21	TRANSFORMER ASSY, FLYBACK
T601	⚠1-421-582-00	TRANSFORMER, FERRITE LFT
T602	1-446-194-00	TRANSFORMER, CHOPPER DRIVE RDT
T603	1-421-559-00	TRANSFORMER, FERRITE (S.R.T)

THERMISTOR

TH501	1-806-213-00	THERMISTOR TH-90
TH601	1-800-945-00	THERMISTOR S-10K
THP601	⚠1-806-165-00	THERMISTOR (POSITIVE)

CRYSTAL

X301	1-527-345-00	CRYSTAL, OSC

YC MODULE

YCM301	1-235-268-00	MODULE

Ref.No.	Part No.	Description				Remark
	♣:1-611-281-11	H1 BOARD				
		********				

DIODE

D471	8-719-911-19	DIODE 1SS119
D472	8-719-911-19	DIODE 1SS119

RESISTOR

R471	1-247-895-00	CARBON	470K	5%	1/6W
R473	1-214-783-00	METAL	180K	1%	1/4W
R474	1-214-769-00	METAL	47K	1%	1/4W
R475	1-247-845-00	CARBON	3.9K	5%	1/6W

VARIABLE RESISTOR

RV471	1-228-539-00	RES, VAR, CARBON 10K
RV472	1-228-583-00	RES, VAR, CARBON 20K

SWITCH

S471	1-553-329-00	SWITCH, PUSH (MONO KEY)
S472	1-553-329-00	SWITCH, PUSH (MONO KEY)
S473	1-553-329-00	SWITCH, PUSH (MONO KEY)
S474	1-553-329-00	SWITCH, PUSH (MONO KEY)
S475	1-553-329-00	SWITCH, PUSH (MONO KEY)
S476	1-553-329-00	SWITCH, PUSH (MONO KEY)
S477	1-553-329-00	SWITCH, PUSH (MONO KEY)
S478	1-553-329-00	SWITCH, PUSH (MONO KEY)
S479	1-553-329-00	SWITCH, PUSH (MONO KEY)
S481	1-553-329-00	SWITCH, PUSH (MONO KEY)
S482	1-553-329-00	SWITCH, PUSH (MONO KEY)
S483	1-553-329-00	SWITCH, PUSH (MONO KEY)
S484	1-553-329-00	SWITCH, PUSH (MONO KEY)
S485	1-553-329-00	SWITCH, PUSH (MONO KEY)
S486	1-553-329-00	SWITCH, PUSH (MONO KEY)

****

♣:A-1330-478-A	C BOARD, COMPLETE	
	**********	
1-526-762-00	SOCKET, CRT	
♣:4-365-803-00	COVER (MAIN), CV CONTROL	
♣:4-365-804-00	COVER (REAR LID), CV CONTROL	

CAPACITOR

C702	1-102-978-00	CERAMIC	220PF	5%	50V
C703	1-102-971-00	CERAMIC	82PF	5%	50V
C704	1-102-971-00	CERAMIC	82PF	5%	50V
C705	1-102-249-00	CERAMIC	680PF	20%	2KV
C706	1-129-714-00	FILM	0.01MF	20%	630V
C720	1-102-155-00	CERAMIC	330PF	20%	2KV

COIL

L701	1-407-681-00	MICRO INDUCTOR 1UH
L704	1-408-424-00	MICRO INDUCTOR 180UH

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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Ref.No.	Part No.	Description				Remark
		TRANSISTOR				
Q701	8-729-322-78	TRANSISTOR 2SC2278				
Q702	8-729-322-78	TRANSISTOR 2SC2278				
Q703	8-729-322-78	TRANSISTOR 2SC2278				
		RESISTOR				
R701	1-247-852-00	CARBON	7.5K	5%	1/6W	
R703	1-247-817-00	CARBON	270	5%	1/6W	
R704	1-247-844-00	CARBON	3.6K	5%	1/6W	
R705	1-202-824-00	SOLID	3.3K		1/2W	
R706	1-206-690-00	METAL OXIDE	12K	5%	2W	F
R707	1-247-846-00	CARBON	4.3K	5%	1/6W	
R708	1-247-826-00	CARBON	620	5%	1/6W	
R709	1-247-823-00	CARBON	470	5%	1/6W	
R710	1-247-844-00	CARBON	3.6K	5%	1/6W	
R711	1-202-824-00	SOLID	3.3K		1/2W	
R712	1-206-690-00	METAL OXIDE	12K	5%	2W	F
R713	1-247-846-00	CARBON	4.3K	5%	1/6W	
R714	1-247-826-00	CARBON	620	5%	1/6W	
R715	1-247-823-00	CARBON	470	5%	1/6W	
R716	1-247-844-00	CARBON	3.6K	5%	1/6W	
R717	1-202-824-00	SOLID	3.3K		1/2W	
R718	1-206-690-00	METAL OXIDE	12K	5%	2W	F
R719	1-202-842-51	SOLID	220K		1/2W	
R720	1-202-719-00	SOLID	1M	10%	1/2W	
R722	1-202-848-00	SOLID	680K		1/2W	
R724	1-202-838-00	SOLID	100K		1/2W	
R727	1-247-807-00	CARBON	100	5%	1/6W	
R728	1-247-807-00	CARBON	100	5%	1/6W	
R729	1-247-807-00	CARBON	100	5%	1/6W	
R730	1-202-827-51	SOLID	5.6K		1/2W	
		VARIABLE RESISTOR				
RV701	1-230-105-00	RES, ADJ, CARBON 3.3K				
RV702	1-230-103-00	RES, ADJ, CARBON 2.2K				
RV703	1-230-104-00	RES, ADJ, CARBON 4.7K				
RV704	1-230-103-00	RES, ADJ, CARBON 2.2K				
RV705	1-230-104-00	RES, ADJ, CARBON 4.7K				
RV706	1-230-164-00	RES, ADJ, METAL GLAZE 55M				
RV707	1-226-114-00	RES, ADJ, METAL GLAZE 2.2M				
RV708	1-226-114-00	RES, ADJ, METAL GLAZE 2.2M				
RV709	1-228-724-00	RES, ADJ, CERAMIC CARBON 10K				

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♣:	1-611-284-11	L BOARD
		*******
♣:	4-368-119-00	HOLDER, LED
		DIODE
LED471	8-719-800-24	DIODE TLR147
LED472	8-719-812-41	DIODE TLR124

Ref.No.	Part No.	Description				Remark
♣:	A-1355-081-A	S1 BOARD, COMPLETE				
		**********				
♣:	4-365-811-00	CASE (MAIN), SHIELD, VIF				
♣:	4-368-165-02	LID, UPPER, VIF SHIELD CASE				
♣:	4-368-166-01	LID, BOTTOM, VIF SHIELD CASE				
		CAPACITOR				
C201	1-123-356-00	ELECT	10MF	20%	16V	
C202	1-108-389-00	MYLAR	0.1MF	10%	100V	
C203	1-108-387-00	MYLAR	0.068MF	10%	100V	
C204	1-108-389-00	MYLAR	0.1MF	10%	100V	
C205	1-123-356-00	ELECT	10MF	20%	16V	
C206	1-123-332-00	ELECT	47MF	20%	16V	
C207	1-108-387-00	MYLAR	0.068MF	10%	100V	
C208	1-123-356-00	ELECT	10MF	20%	16V	
C209	1-102-963-00	CERAMIC	33PF	5%	50V	
C210	1-123-356-00	ELECT	10MF	20%	16V	
C211	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C212	1-102-963-00	CERAMIC	33PF	5%	50V	
C213	1-123-356-00	ELECT	10MF	20%	16V	
C214	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C215	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C216	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C217	1-123-609-00	ELECT	0.33MF	20%	50V	
C218	1-161-051-00	CERAMIC	0.01MF	10%	50V	
C219	1-102-525-00	CERAMIC	68PF	5%	50V	
C220	1-161-021-00	CERAMIC	0.047MF	10%	25V	
C221	1-123-318-00	ELECT	33MF	20%	16V	
C222	1-161-059-00	CERAMIC	0.047MF	10%	50V	
C224	1-123-318-00	ELECT	33MF	20%	16V	
C225	1-102-824-00	CERAMIC	470PF	5%	50V	
C226	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C227	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C228	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C229	1-102-513-00	CERAMIC	18PF	5%	50V	
C230	1-102-525-00	CERAMIC	68PF	5%	50V	
C231	1-121-705-00	ELECT	2.2MF	30%	25V	
C232	1-123-021-00	ELECT	0.47MF	30%	50V	
C233	1-108-242-00	MYLAR	0.022MF	10%	50V	
C234	1-123-380-00	ELECT	1MF	20%	50V	
C235	1-102-523-00	CERAMIC	56PF	5%	50V	
C236	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C237	1-102-822-00	CERAMIC	390PF	5%	50V	
C238	1-102-525-00	CERAMIC	68PF	5%	50V	
C239	1-102-513-00	CERAMIC	18PF	5%	50V	
C240	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C241	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C242	1-123-317-00	ELECT	22MF	20%	16V	
		FILTER				
CF201	1-404-134-00	TRAP, CERAMIC (5.5MHZ)				
CF202	1-527-263-00	CERAMIC FILTER (5.5MHZ)				
CF203	1-404-473-00	DISCRIMINATOR, CERAMIC				

S1 Z N

Ref.No.	Part No.	Description				Remark
		DIODE				
D201	⚠8-719-911-19	DIODE 1SS119				
D202	8-719-101-51	DIODE RD5.1E-L3				
		IC				
IC201	8-759-800-12	IC LA7920				
IC202	8-752-001-51	IC CX20015A				
		COIL				
L201	1-407-488-00	MICRO INDUCTOR 470UH				
L202	1-408-397-00	MICRO INDUCTOR 1UH				
L203	1-408-408-00	MICRO INDUCTOR 8.2UH				
L204	1-408-410-00	MICRO INDUCTOR 12UH				
L205	1-408-400-00	MICRO INDUCTOR 1.8UH				
L206	1-408-413-00	MICRO INDUCTOR 22UH				
L207	1-404-465-00	COIL, VIF (MOLD TYPE)				
L208	1-404-465-00	COIL, VIF (MOLD TYPE)				
L209	1-408-424-00	MICRO INDUCTOR 180UH				
		TRANSISTOR				
Q201	8-729-245-83	TRANSISTOR 2SC2458				
Q202	8-765-300-00	TRANSISTOR 2SC2009				
Q203	8-729-204-83	TRANSISTOR 2SA1048-GR				
Q204	8-729-245-83	TRANSISTOR 2SC2458				
		RESISTOR				
R201	1-247-839-00	CARBON	2.2K	5%	1/6W	
R202	⚠1-246-530-00	CARBON	240K	5%	1/4W	
R203	1-247-879-00	CARBON	100K	5%	1/6W	
R204	1-247-879-00	CARBON	100K	5%	1/6W	
R205	1-247-847-00	CARBON	4.7K	5%	1/6W	
R206	1-247-847-00	CARBON	4.7K	5%	1/6W	
R207	1-247-839-00	CARBON	2.2K	5%	1/6W	
R208	1-247-863-00	CARBON	22K	5%	1/6W	
R209	1-247-855-00	CARBON	10K	5%	1/6W	
R210	1-247-891-00	CARBON	330K	5%	1/6W	
R211	1-247-839-00	CARBON	2.2K	5%	1/6W	
R212	1-247-839-00	CARBON	2.2K	5%	1/6W	
R213	1-247-803-00	CARBON	68	5%	1/6W	
R214	1-247-833-00	CARBON	1.2K	5%	1/6W	
R215	1-247-845-00	CARBON	3.9K	5%	1/6W	
R216	1-247-813-00	CARBON	180	5%	1/6W	
R217	1-247-818-00	CARBON	300	5%	1/6W	
R218	1-247-807-00	CARBON	100	5%	1/6W	
R219	1-247-825-00	CARBON	560	5%	1/6W	
R220	1-247-822-00	CARBON	430	5%	1/6W	
R221	1-247-826-00	CARBON	620	5%	1/6W	
R222	1-247-843-00	CARBON	3.3K		1/6W	
R223	1-247-847-00	CARBON	4.7K	5%	1/6W	
R224	1-247-883-00	CARBON	150K	5%	1/6W	
R225	1-247-805-00	CARBON	82	5%	1/6W	
R226	1-247-841-00	CARBON	2.7K	5%	1/6W	
R227	1-247-831-00	CARBON	1K	5%	1/6W	
R228	1-247-871-00	CARBON	47K	5%	1/6W	
R229	1-247-857-00	CARBON	12K	5%	1/6W	
R230	1-247-857-00	CARBON	12K	5%	1/6W	
R232	1-247-863-00	CARBON	22K	5%	1/6W	
R233	1-247-839-00	CARBON	2.2K	5%	1/6W	
R234	1-247-828-00	CARBON	750	5%	1/6W	
R235	1-247-831-00	CARBON	1K	5%	1/6W	
R236	1-247-829-00	CARBON	820	5%	1/6W	
R237	1-247-783-00	CARBON	10	5%	1/8W	F
R238	1-214-714-51	METAL	240	1%	1/4W	
R239	1-214-134-00	METAL	1.2K	1%	1/4W	
		VARIABLE RESISTOR				
RV201	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K				
		CONNECTOR				
S1	♣:1-560-127-00	PLUG, CONNECTOR (2.5MM) 7P				
S2	♣:1-560-128-00	PLUG, CONNECTOR (2.5MM PITCH) 8P				
		FILTER				
SF201	⚠1-404-433-00	SAWF				
	♣:4-336-029-00	PLATE, SHIELD; SF201				
		COIL				
T201	1-404-465-00	COIL, VIF (MOLD TYPE)				
T204	1-404-465-00	COIL, VIF (MOLD TYPE)				
		TUNER				
TU201	⚠1-463-421-21	TUNER, ET (BT-883)				
**********						
	♣:1-611-285-11	Z BOARD *******				
		JACK				
EJ901	1-507-864-00	JACK, EARPHONE				
**********						
	♣:1-606-794-00	N BOARD *******				
	♣:1-556-332-00	CONNECTOR ASSY (2.5MM) 3P				
	♣:4-342-117-00	CASE, SHIELD (MAIN), R				
	♣:4-342-118-00	LID, SHIELD CASE, R				
		CAPACITOR				
C1	1-123-617-00	ELECT	10MF	20%	16V	
C2	1-123-617-00	ELECT	10MF	20%	16V	
C3	1-123-617-00	ELECT	10MF	20%	16V	
C4	1-161-019-00	CERAMIC	0.033MF	10%	25V	
C5	1-108-567-00	MYLAR	0.0033MF	5%	50V	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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Ref.No.	Part No.	Description	Remark
C6	1-123-821-00	ELECT 47MF 20% 16V	
		DIODE	
D1	8-719-110-32	DIODE PH302B	
		IC	
IC1	8-759-113-73	IC UPC1373H	
		COIL	
L1	1-404-310-00	COIL 4.7MH	

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MISCELLANEOUS
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	⚠1-451-230-00	DEFLECTION YOKE (SY-125)	
	1-452-032-00	MAGNET, DISK; 10MM/	
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM	
	1-452-277-00	MAGNET, BMC	
	1-501-152-00	ROD ANTENNA, TYPE B	
	⚠1-551-908-31	CORD, POWER, EULO PLUG	
	⚠1-556-565-21	CABLE (PAL.PIN)	
	⚠1-556-983-31	CONNECTOR, COAXIAL ANTENNA	
C905	1-161-491-00	CAP, CERAMIC 470PF	
L901	⚠1-426-145-00	COIL, DEGAUSSING	
L902	⚠1-426-145-00	COIL, DEGAUSSING	
S901	⚠1-553-225-00	SWITCH, PUSH	
SP901	1-503-239-00	SPEAKER	
V901	⚠8-735-550-05	CRT (A34JBU00X)	

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ACCESSORIES AND PACKING MATERIALS
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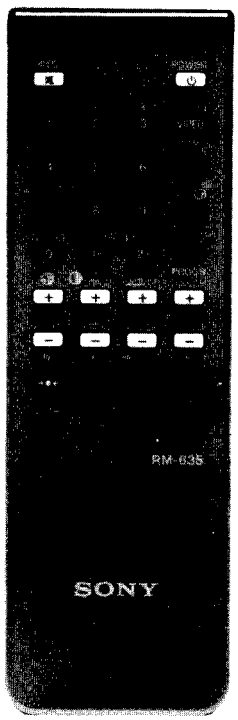
Part No.	Description	Remark
A-1470-625-A	COMMANDER ASSY (RM-635)	
1-504-034-72	MAGNETIC EARPHONE ME-20	
4-314-534-00	BAG, POLYETHYLENE	
4-368-140-00	CUSHION (UPPER) (ASSY)	
4-368-141-00	CUSHION (LOWER) (ASSY)	
4-368-149-01	INDIVIDUAL CARTON	
4-493-831-51	MANUAL, INSTRUCTION	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

RM-635

SERVICE MANUAL



SPECIFICATIONS

Remote control system	Infrared control
Power requirements	3 V dc 2 batteries IEC Designation R03 (size AAA)
Dimensions	Approx. 54 × 16 × 165 mm (w/h/d)
Weight	Approx. 100 g including batteries
Supplied accessory	Battery IEC Designation R03 (2 pcs.)

REMOTE COMMANDER

SONY®

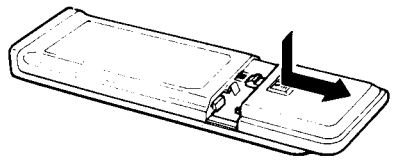
ACC

1. REMOTE CONTROL OPERATION — with the supplied RM-635 Remote Commander

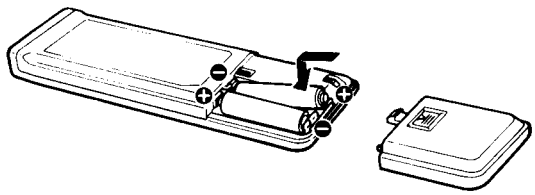
BATTERY INSTALLATION

The Sony RM-635 Remote Commander operates on two supplied IEC designation R03 batteries (size AAA).

1 Remove the battery compartment lid



2 Insert batteries observing the correct polarity and close the lid.



NOTES ON THE REMOTE COMMANDER

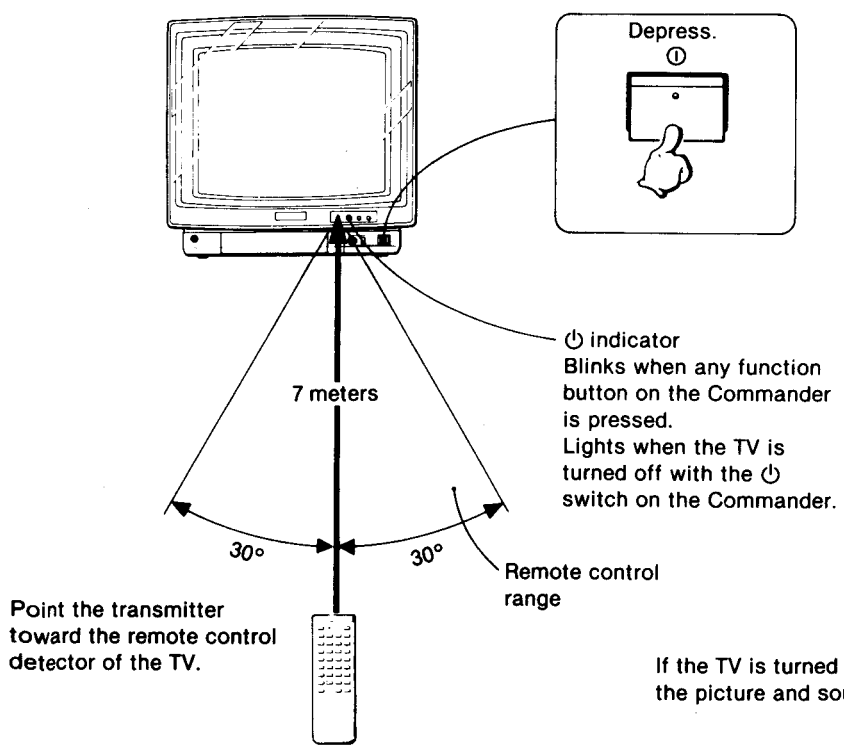
- In normal use, battery life is up to half a year. When the batteries are exhausted, the Commander will not operate the TV properly. If this happens, replace both batteries with new ones.
- When the Commander is not used for a long period of time, remove the batteries to avoid damage from possible battery leakage.
- Keep the Commander away from extremely hot or humid places.
- Avoid dropping any foreign object into the cabinet, particularly when replacing batteries.

FUNCTION OF THE BUTTONS ON THE REMOTE COMMANDER

Each button has different functions for normal TV and VTR operations.
Functions for operating the TV are indicated **in black or white.**
Functions for operating the video tape recorder* are indicated in **brown.**
Functions for teletext operation using the optional OPK-103 teletext adaptor are indicated **in green.**

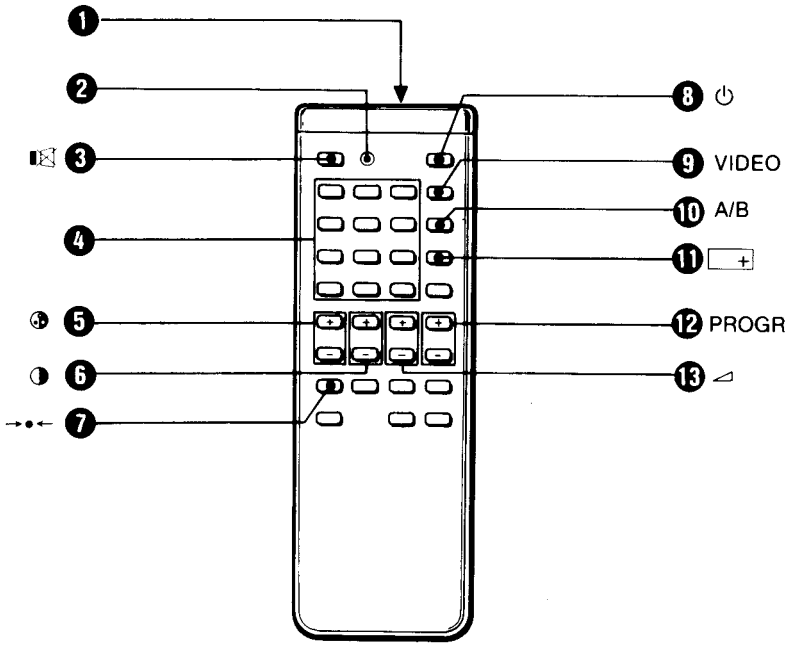
* This Remote Commander can control the Sony SL-F1E combined with the TT-F1 series tuner timer unit, and Sony SL-C9 series.

REMOTE TV OPERATION


Depress.
⏻
⏻ indicator
Blinks when any function button on the Commander is pressed.
Lights when the TV is turned off with the ⏻ switch on the Commander.
7 meters
30°
30°
Remote control range
Point the transmitter toward the remote control detector of the TV.

If the TV is turned off with the Remote Commander (standby mode), the picture and sound settings will be memorized.

Buttons used for normal TV operations



❶ Transmitter
Point toward the remote control detector.

❷ Pilot lamp
Blinks when the Remote Commander is operating.
If the lamp does not light when the button is pressed, battery replacement is required.

❸ (sound mute) button
When you want to mute the sound (to answer the telephone, for instance) press this button. To restore the sound, press this button again.

❹ Program number buttons
Programs are selected by pressing the corresponding numbers.
For programs 1 through 9, press the appropriate single-digit button.
For programs 10 through 19, first press the [1–] button, then the button corresponding to the last digit of the program number.

For example: for program 10, press [1–] and [0] .
for program 11, press [1–] and [1] .

Similarly, for programs 20 to 29, press the [2–] buttons and then the single-digit button.
For program 30, press the [0] button.

Note: If you do not press a single-digit button within several seconds after pressing the [1–] or [2–] button, the previous program setting will be automatically recalled.

❺ (color) buttons
Adjust the color intensity. Press the + button to increase it, or the – button to decrease it.

❻ (picture) buttons
Function the same as the ◑ buttons on the TV. Press the + button to increase the picture contrast, or the – button to decrease it.

❼ →•← (normal) button
Pressing this button once instantly returns the color and contrast settings made with the ◑ and buttons on the Commander to the factory preset levels.

❽ ⏻ (standby) switch
Turn the TV in standby mode. The ⏻ indicator on the TV will light up. To turn on the TV from the standby mode, press a program number button or →•← button on the Commander.

❾ VIDEO button
This button is not usable for this TV.
When this button is pressed, "AU" will momentarily light on the TV screen, but will immediately disappear.

❿ A/B button
This button is not usable for this TV.

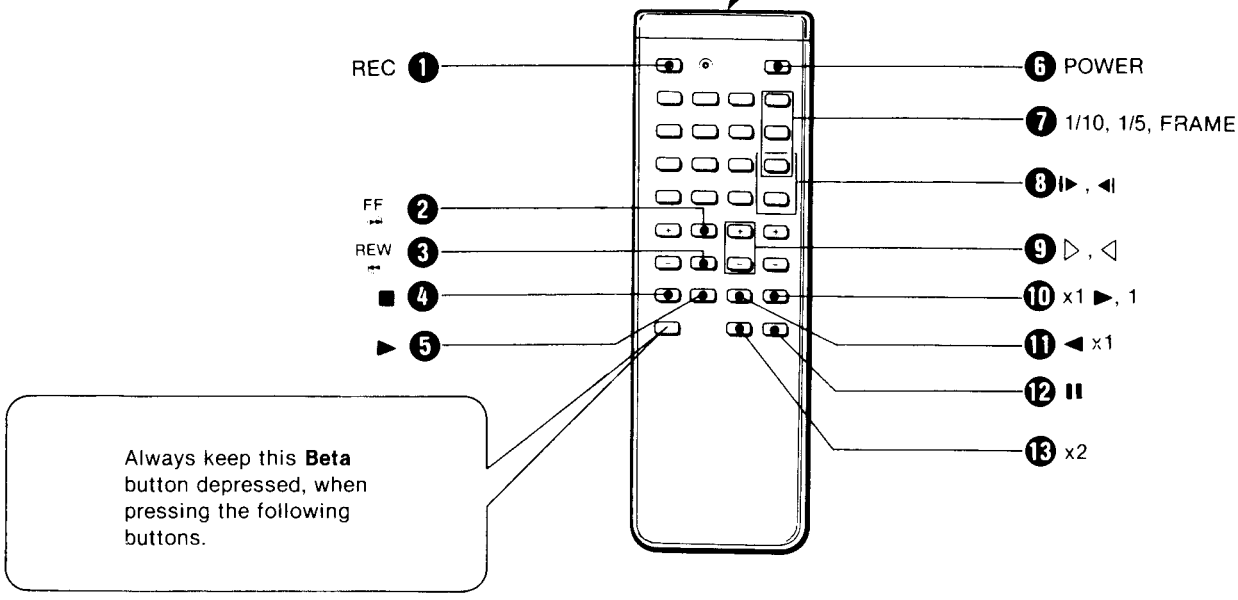
⓫ + (display) button
Press this button to extinguish the program number. Then, each time you press the PROGR button to change the program, the indications on the screen will disappear in a few seconds. To display, press again.

⓬ PROGR (program) buttons
Function the same as the PROGR buttons on the TV.

⓭ (volume) buttons
Adjust the volume. Press the + button to increase the volume, or the – button to decrease it.

Buttons used for VTR operations

Transmitter
To operate the VTR, point the transmitter toward the remote control detector of the VTR (SL-C9 series) or the tuner timer unit (TT-F1 series).



Buttons which have the same functions for both SL-C9 series and SL-F1E

❶ REC (record) button
Press to start recording.

❷ FF (fast-forward) button
Press to advance the tape rapidly. This button is also used for the forward picture-search operation.

❸ REW (rewind) button
Press to rewind the tape. This button is also used for the reverse picture-search operation.

❹ ■ (stop) button
Press to stop the tape.

❺ ► (play) button
Press to play the tape back.

❻ POWER switch
Press to turn the video tape recorder (and the tuner timer unit) on or off.

⓬ II (pause) button
Functions the same as the II PAUSE button on the SL-C9 series and the PAUSE button on the SL-F1E. To release the pause mode, press this button again.

⓭ x2 (double-speed) button
Functions the same as the x2 button on the video tape recorder. Press to obtain a double-speed playback picture.

Buttons used for the SL-C9 series

❼ Speed control buttons (1/10, 1/5, FRAME)
Function the same as the 1/10, 1/5 and FRAME of the SPEED CONTROL buttons on the recorder.

❾ ▷ (forward) and ◁ (reverse) buttons
Select the direction of the speed control playback. Function the same as the ▷ and ◁ buttons of the SPEED CONTROL buttons on the recorder.

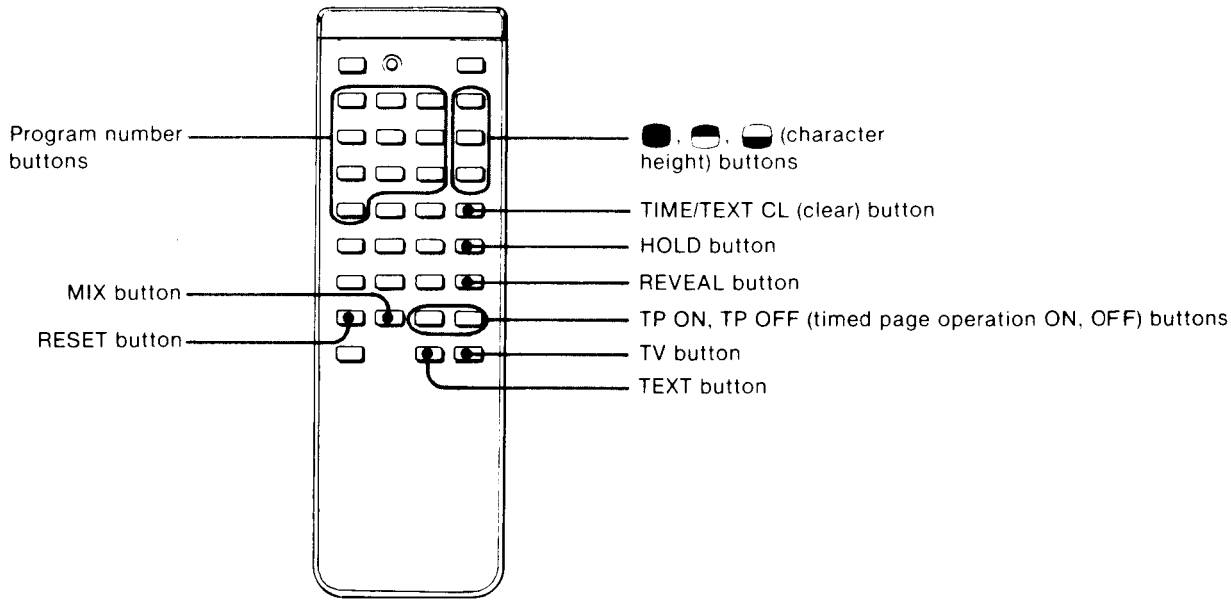
❿ 1 (normal speed) button
Functions the same as the 1 button of the SPEED CONTROL buttons on the recorder.

Buttons used for the SL-F1E

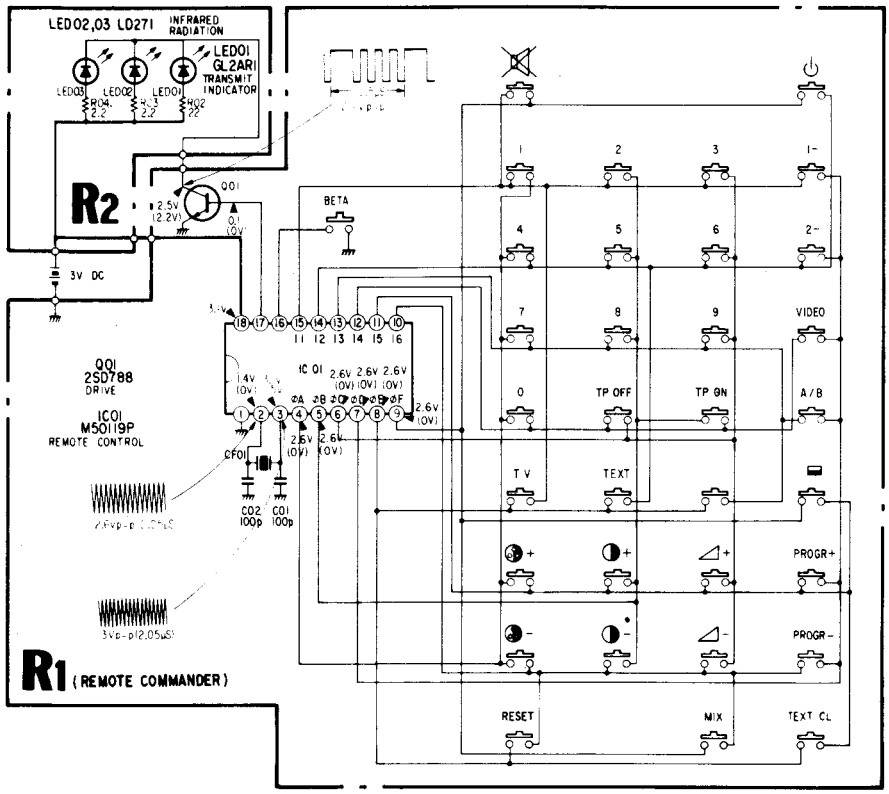
❽ |► (forward slow motion) and ◄| (reverse slow motion) buttons
Function the same as the |► and ◄| SWING SEARCH buttons on the SL-F1E.

❿ x1 ► (forward) button and ⓫ ◄ x1 (reverse) button
Function the same as the ► and ◄ SWING SEARCH buttons on the SL-F1E.

Buttons used for telectext operations
The following functions can be operated by installing the optional Sony OPK-103 teletext adaptor. For details, please read the instruction manual of the teletext adaptor.



2. SCHEMATIC DIAGRAM



MODE \ CPIN	0	1	2	13	14	15	16	17
⏻	3.	3.	3.	3	2.6	3.1	3.1 (0.15)	0
🔇	3.1	3.1	3.1	3.1	3.1	2.6	3.1 (0.15)	0
	3.1	3.	3.	3.	3.	2.6	3.1 (0.15)	0
2	3.1	3.	3.	3.	3.	2.6	3.1 (0.15)	0
3	3.	3.1	3.	3.1	3.1	2.6	3.1 (0.15)	0
4	3.	3.1	3.	3.1	2.6	3.1	3.1 (0.15)	0
5	3.1	3.	3.	3.1	2.6	3.	3.1 (0.15)	0
6	3	3.	3.	3.1	2.6	3	3. (0.15)	0
7	3.	3.1	3.1	2.6	3.1	3.1	3. (0.15)	0
8	3.1	3.1	3.1	2.6	3.	3.	3.1 (0.15)	0
9	3.1	3.	3.1	2.6	3.	3.1	3.1 (0.15)	0
0	3.1	3.1	2.6	3.	3.1	3	3.1 (0.15)	0
1-	3.	3.	3.	3.	3.	2.6	3.1 (0.15)	0
2-	3.	3.	3.	3.	2.6	3.1	3.1 (0.15)	0
VIDEO	3.	3.	2.6	3.1	3.	3	3.1 (0.15)	0
TP OFF	3.1	3.1	2.6	3.1	3.1	3.1	3.1 (0.15)	0.2
TP ON	3.	3.	2.6	3.1	3.1	3.1	3.1 (0.15)	0.2
A/B	3.	3.	3.	2.6	3.1	3	3.1 (0.15)	0.2
TV	3.1	3.	3.	3.	3.	2.6	3.1 (0.15)	0
TEXT	3.1	3.1	3.	3.	2.6	3.1	3.1 (0.15)	0
VIEWDATA	3.	3.	3.1	2.6	3.	3.	3.1 (0.15)	0
▬ +	3.	2.6	3.1	3.	3.	3.1	3. (0.15)	0.2
◐ +	3.	2.6	3.	3.	3.	3.	3.1 (0.15)	0.2
◐ -	2.6	3.	3.	3.	3.	3.	3.1 (0.15)	0.2
◑ +	3.	2.6	3.1	3	3.	3.	3.1 (0.15)	0.2
◑ -	2.6	3.	3.	3.1	3.	3.1	3.1 (0.15)	0.2
◿ +	3.	2.6	3.	3	3.	3.	3.1 (0.15)	0.2
◿ -	2.6	3.	3.	3.	3.	3.	3.1 (0.15)	0.2
PROGR +	3	2.6	3.	3	3.1	3.1	3.1 (0.15)	0.2
PROGR -	2.6	3.1	3.	3	3	3	3.1 (0.15)	0.2
RESET	2.6	3	3.	3.	3.	3.	3.1 (0.15)	0
MIX	2.6	3.	3.1	3.1	3.1	3.1	3.1 (0.15)	0
TEXT CL	3.	2.6	3.1	3.	3.1	3.	3.1 (0.15)	0.2

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, 1/6W unless otherwise noted. kΩ = 1000Ω, MΩ = 1000kΩ
- Voltages and waveform are for when [A/B] button is pressed.
- Voltages in ( ) are taken with button not pressed.
- All voltages are in V.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 MΩ digital multimeter.
- Voltage variations may be noted due to normal production tolerances.
- ——— : B + bus

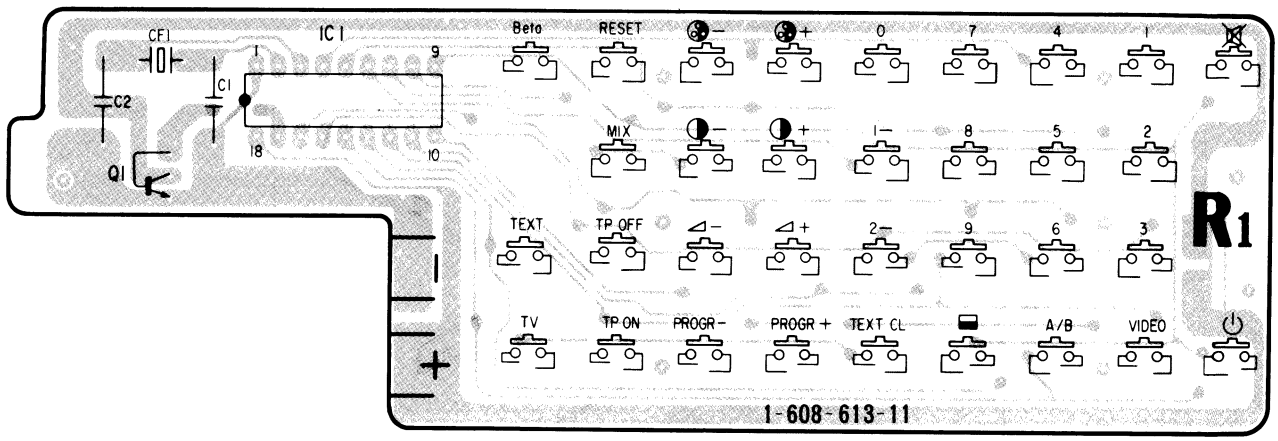
3. PRINTED WIRING BOARDS

– Conductor Side –

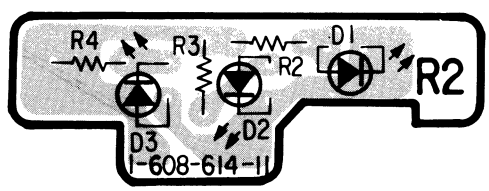
A B C D

1 2 3 4 5

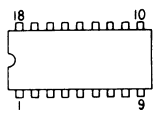
– R1 Board –



– R2 Board –

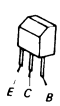


M50119P

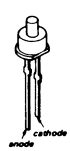


2SC1474
2SD788

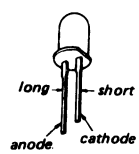
2SD773



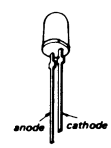
GL-2AR1



LD271

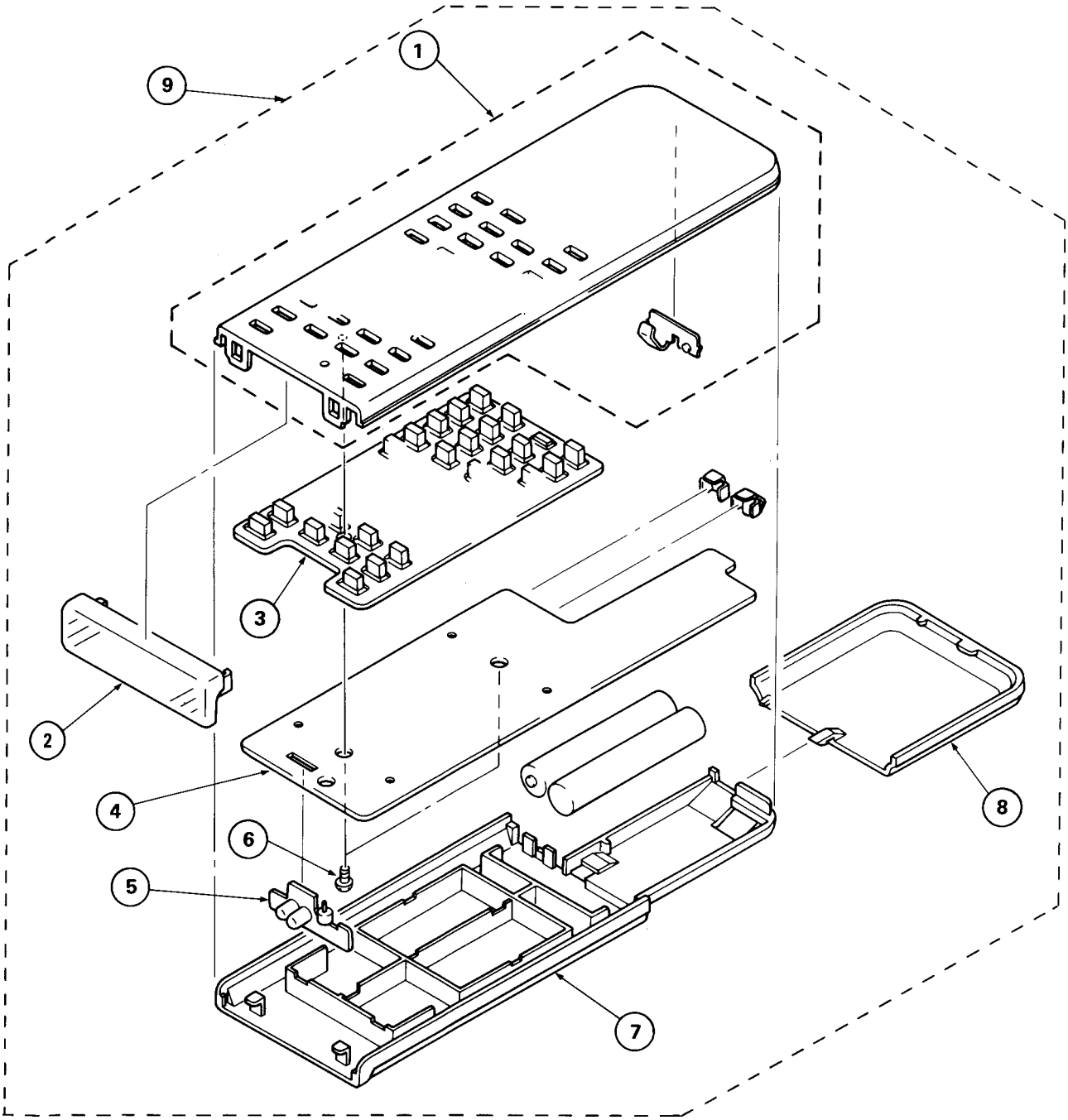


SE303A
SE303AX
SE303AY



4. EXPLODED VIEW

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



No.	Part No.	Description	Remark
1	X-4362-211-0	CASE (UPPER) ASSY, COMMANDER	
2	4-361-943-00	PANEL, FRONT, COMMANDER	
3	4-361-944-21	SHEET, RUBBER	
4	♦:1-608-613-00	R1 BOARD	
5	♦:1-608-614-00	R2 BOARD	
6	4-356-741-00	SCREW, TAPPING (BIND 2X5)	
7	4-361-948-00	CASE (LOWER), COMMANDER	
8	4-361-945-00	COVER, BATTERY	
9	A-1470-625-A	COMMANDER ASSY (RM-635)	1-8

R1 R2

5. ELECTRICAL PARTS LIST

- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

When indicating parts by reference number, please include the board name.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
• MF : μF, PF : μμF

RESISTORS
• All resistors are in ohms
• F : nonflammable

COILS
• MMH : mH, UH : μH

Ref.No.	Part No.	Description			Remark
	♦:1-608-613-00	R1 BOARD ********			
	4-348-542-00	TERMINAL (A), BATTERY			
	4-348-543-00	TERMINAL (B), BATTERY			
		CAPACITOR			
C01	1-161-315-00	CERAMIC	220PF	10% 50V	
C02	1-161-315-00	CERAMIC	220PF	10% 50V	
		FILTER			
CF01	1-527-476-00	OSCILLATOR, CERAMIC			
		IC			
IC01	8-759-600-07	IC M50119P			
		TRANSISTOR			
Q01	8-729-378-84	TRANSISTOR 2SD788			
**********					
	♦:1-608-614-00	R2 BOARD ********			
		DIODE			
D01	8-719-900-23	DIODE GL-2AR1			
LED02	8-719-107-82	DIODE SE303AY			
LED03	8-719-107-82	DIODE SE303AY			
		RESISTOR			
R02	1-247-791-00	CARBON	22	5% 1/6W	
R03	1-247-767-00	CARBON	2.2	5% 1/6W	
R04	1-247-767-00	CARBON	2.2	5% 1/6W	

KV-1412EG
RM-635

SONY

SERVICE MANUAL

Germany Model

Chassis No. SCC-686A-A

August, 1985

No. 1

SUPPLEMENT

SUBJECT: CIRCUIT MODIFICATIONS BUILT-IN SECAM ADAPTER (OPK-102)

File the supplement with the service manual.

TABLE OF CONTENTS

Section	*Title*	*Page*
1.	**DIAGRAMS**	
	1-1. Circuit Boards Location	3
	1-2. Schematic Diagrams	4
	1-3. Printed Wiring Board	11
2.	**ELECTRICAL PARTS LIST**	19

NOTE

Please use this manual for the units which include SECAM-ADAPTER (OPK-102) as stsndard equipment.

MICROFILM

CTV

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

WARNUNG !!

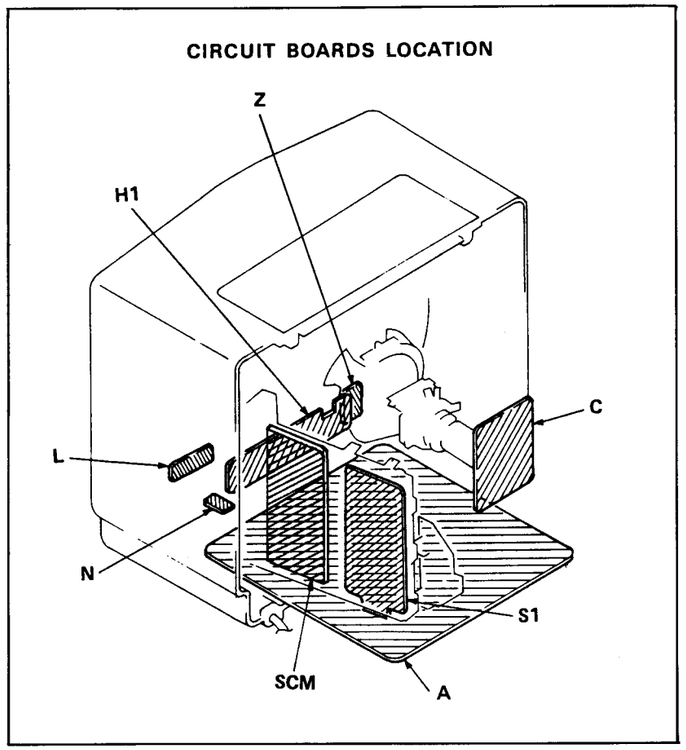
UM ELEKTRISCHE SCHLÄGE ZU VERMEIDEN, SOWIE MESSGERÄTE BEI REPARATUREN VOR ZERSTÖRUNG ZU SCHÜTZEN, DARF DAS GERÄT BEI ABGENOMMENER RÜCKWAND NUR ÜBER EINEN ENTSPRECHEND DIMENSIONIERTEN TRENNTRANSFORMATOR BETRIEBEN WERDEN.

SICHERHEITSHINWEIS FÜR KOMPONENTEN !!

DIE IN DEN SCHALTBILDERN, DEN IN EINZELTEILE AUFGELÖSTEN PERSPEKTIVISCHEN ZEICHNUNGEN UND DEN TEILELISTEN SCHRAFFIERT EINGEZEICHNETE UND DURCH DAS ZEICHEN ⚠ GEKENNZEICHNETE KOMPONENTEN SIND FÜR DIE BETRIEBSSICHERHEIT KRITISCH. DIESE KOMPONENTEN SIND DURCH SOLCHE SONY TEILE ZU ERSETZEN, DEREN TEILENUMMERN IN DIESEM HANDBUCH ODER IN VON SONY HERAUSGEGEBENEN ERGÄNZUNGEN ANGEGEBEN SIND.
AUF FÜR DIE BETRIEBSSICHERHEIT KRITISCHE SCHALTUNGSEINSTELLUNGEN WIRD IN DIESEM HANDBUCH HINGEWIESEN.
BEFOLGEN SIE DIESE ANWEISUNGEN STETS, WENN KRITISCHE KOMPONENTEN AUSGEWECHSELT WERDEN ODER VERDACHT AUF FUNKTIONSSTÖRUNGEN BESTEHT.

SECTION 1
DIAGRAMS

1-1. CIRCUIT BOARDS LOCATION

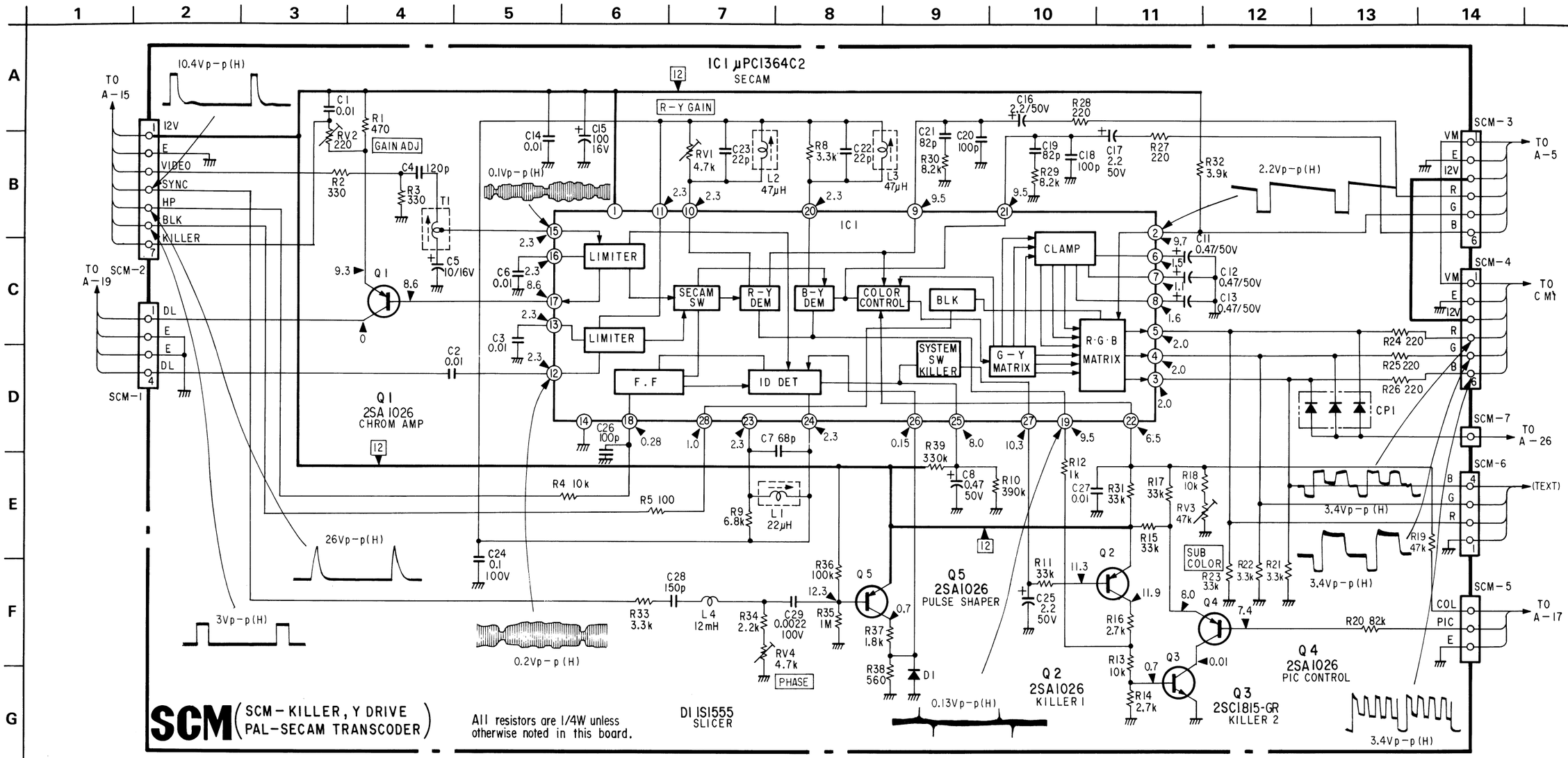


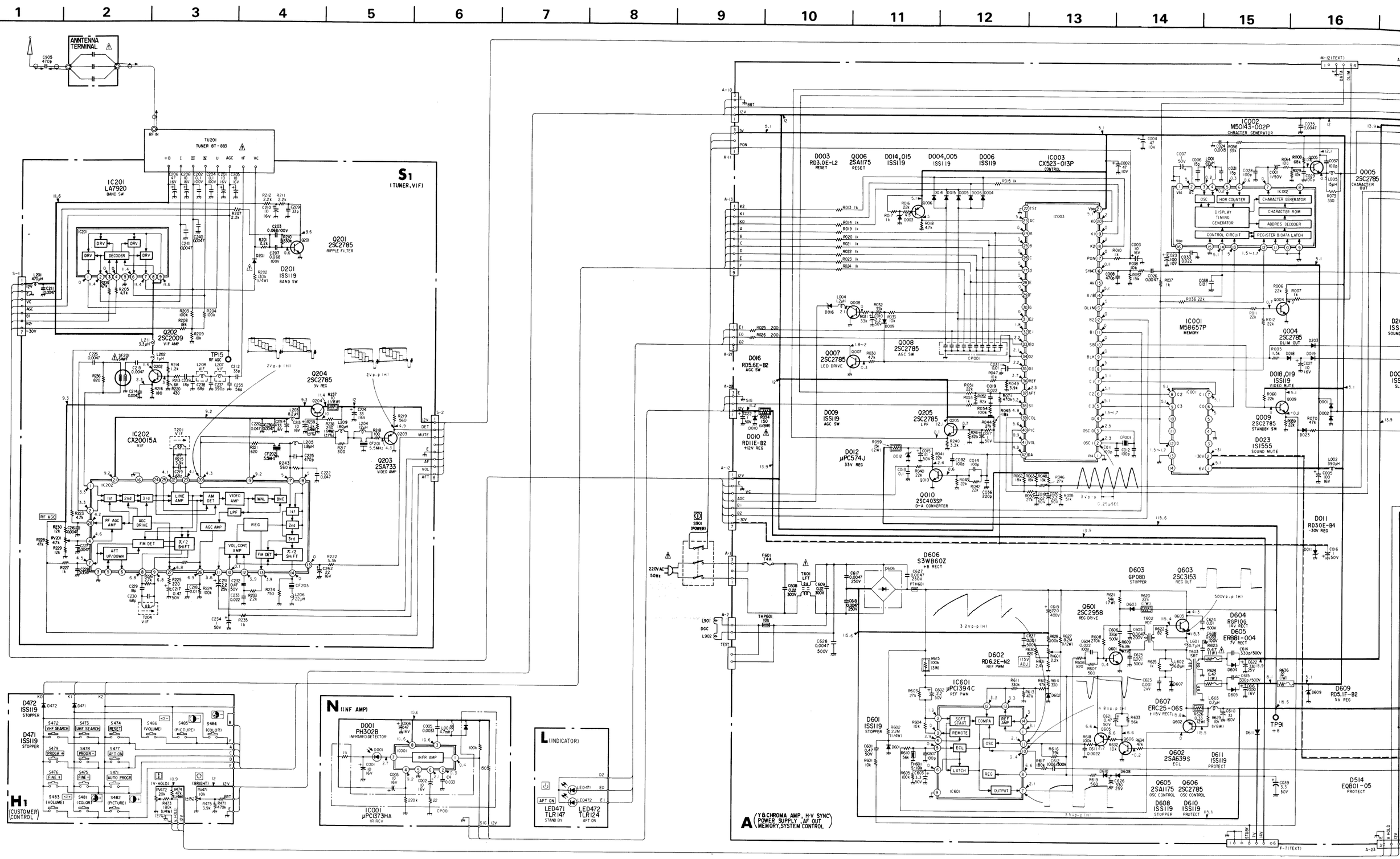
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, 1/6W unless otherwise noted. kΩ = 1000Ω, MΩ = 1000kΩ
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- : panel designation.
- All voltages are in V.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 MΩ digital multimeter.
- Voltage variations may be noted due to normal production tolerances.
- Readings are taken with a color-bar signal input.
- : adjustment for repair.
- ——— : B + bus
- ----- : B – bus

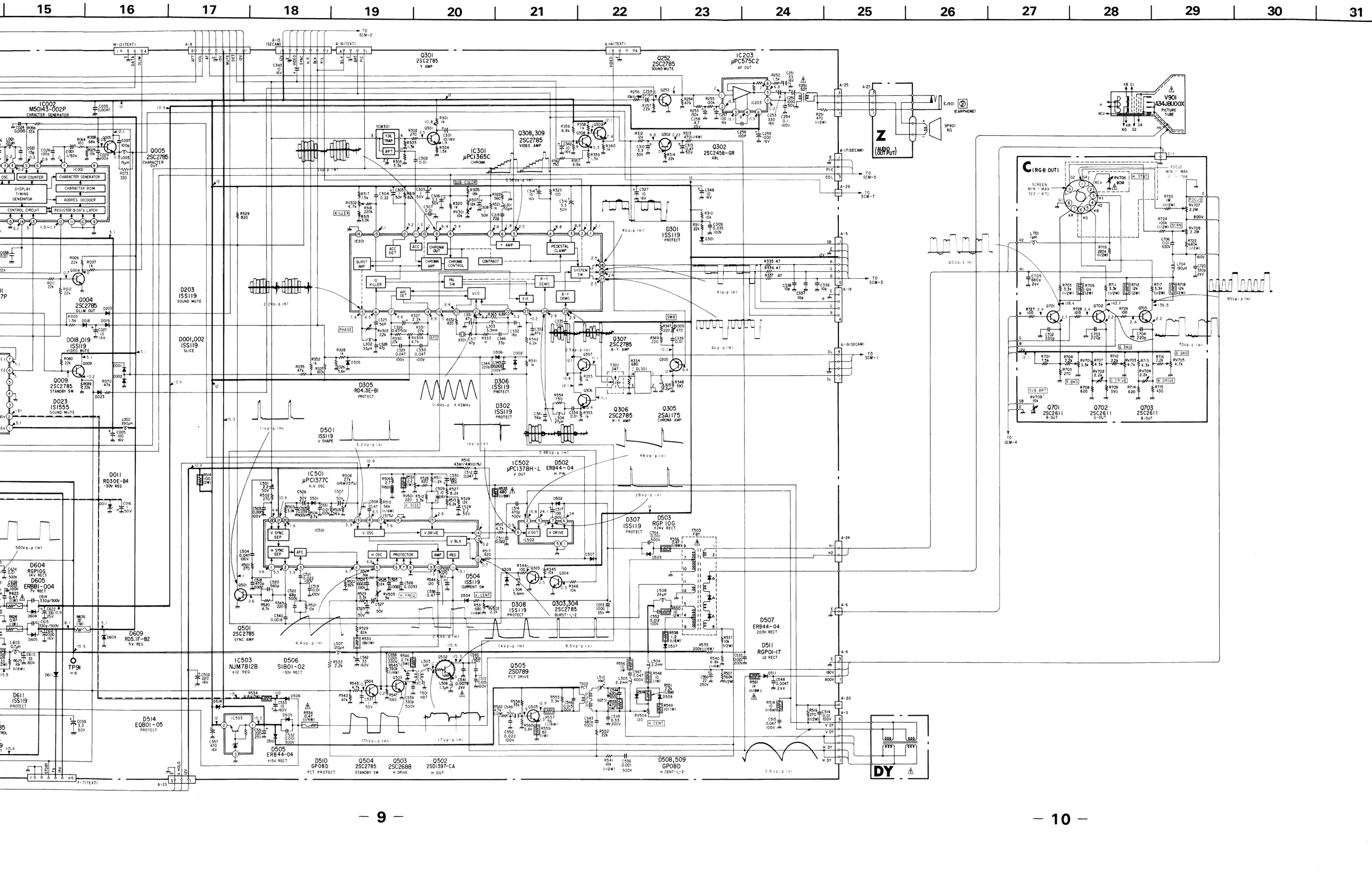
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

1-2. SCHEMATIC DIAGRAMS




ANNTENNA TERMINAL
C905 470p
RF IN
TU201 TUNER BT-883
+B I III IV U AGC IF VC
S1 (TUNER, VIF)
IC201 LA7920 BAND SW
DRV
DECODER
Q201 2SC2785 RIPPLE FILTER
D201 ISS119 BAND SW
Q202 2SC2009 VIF AMP
TP15 RF AGC
Q204 2SC2785 9V REG
IC202 CX20015A VIF
T201 VIF
T204 VIF
1st
2nd
3rd
LINE AMP
AM DET
VIDEO AMP
MNL
BNC
LPF
RF AGC AMP
AGC DRIVE
AGC AMP
REG
FM DET
X/2 SHIFT
AFT UP/DOWN
VOL CONT AMP
Q203 2SA733 VIDEO AMP
DET
MUTE
AF
VOL
AFT
D003 RD3.0E-L2 RESET
Q006 2SA1175 RESET
D014,015 ISS119
D004,005 ISS119
D006 ISS119
IC003 CX523-013P CONTROL
IC002 M50143-002P CHARACTER GENERATOR
OSC
HOR COUNTER
CHARACTER GENERATOR
CHARACTER ROM
DISPLAY TIMING GENERATOR
ADDRES DECODER
CONTROL CIRCUIT
REGISTER & DATA LATCH
Q005 2SC2785 CHARACTER OUT
IC001 M58657P MEMORY
Q004 2SC2785 DLIM OUT
D018,019 ISS119 VIDEO MUTE
Q009 2SC2785 STANDBY SW
D023 IS1555 SOUND MUTE
D016 RD5.6E-B2 AGC SW
Q008 2SC2785 AGC SW
Q007 2SC2785 LED DRIVE
D009 ISS119 AGC SW
Q205 2SC2785 LPF
D010 RD11E-B2 +12V REG
D012 µPC574J 35V REG
Q010 2SC4038P D-A CONVERTER
D011 RD30E-B4 -30V REG
D012 RD12E-B2 +12V REG
S901 (POWER)
F601 T4A
220V AC 50Hz
T601 LFT
D606 S3WB60Z +B RECT
D603 GP08D STOPPER
Q603 2SC3153 REG OUT
Q601 2SC2958 REG DRIVE
D602 RD6.2E-N2 REF PWM
IC601 µPC1394C REF PWM
SOFT START
COMPA
REF AMP
REMOTE
ECL
OSC
LATCH
REG
OUTPUT
D604 RGP10G 14V RECT
D605 ER881-004 7V RECT
D607 ERC25-06S +115V RECT
Q602 2SA639S ECL
D611 ISS119 PROTECT
Q605 2SA1175 OSC CONTROL
Q606 2SC2785 OSC CONTROL
D608 ISS119 STOPPER
D610 ISS119 PROTECT
D609 RD5.1F-B2 5V REG
D514 E0801-05 PROTECT
TP9 +B
A (Y&CHROMA AMP, H·V SYNC POWER SUPPLY, AF OUT MEMORY, SYSTEM CONTROL)
H1 (CUSTOMER CONTROL)
D472 ISS119 STOPPER
D471 ISS119 STOPPER
VHF SEARCH
FINE SEARCH
RESET
PROG +
PROG -
AFT ON
AUTO PROG
(VOLUME)
(PICTURE)
(COLOR)
(V-HOLD)
(BRIGHT)
N (INF AMP)
D001 PH302B INFRARED DETECTOR
IC001 µPC1373HA IR RCV
INFR AMP
L (INDICATOR)
AFT ON
LED471 TLR147 STAND BY
LED472 TLR124 AFT ON

KV-1412EG
RM-635



1-3. PRINTED WIRING BOARD

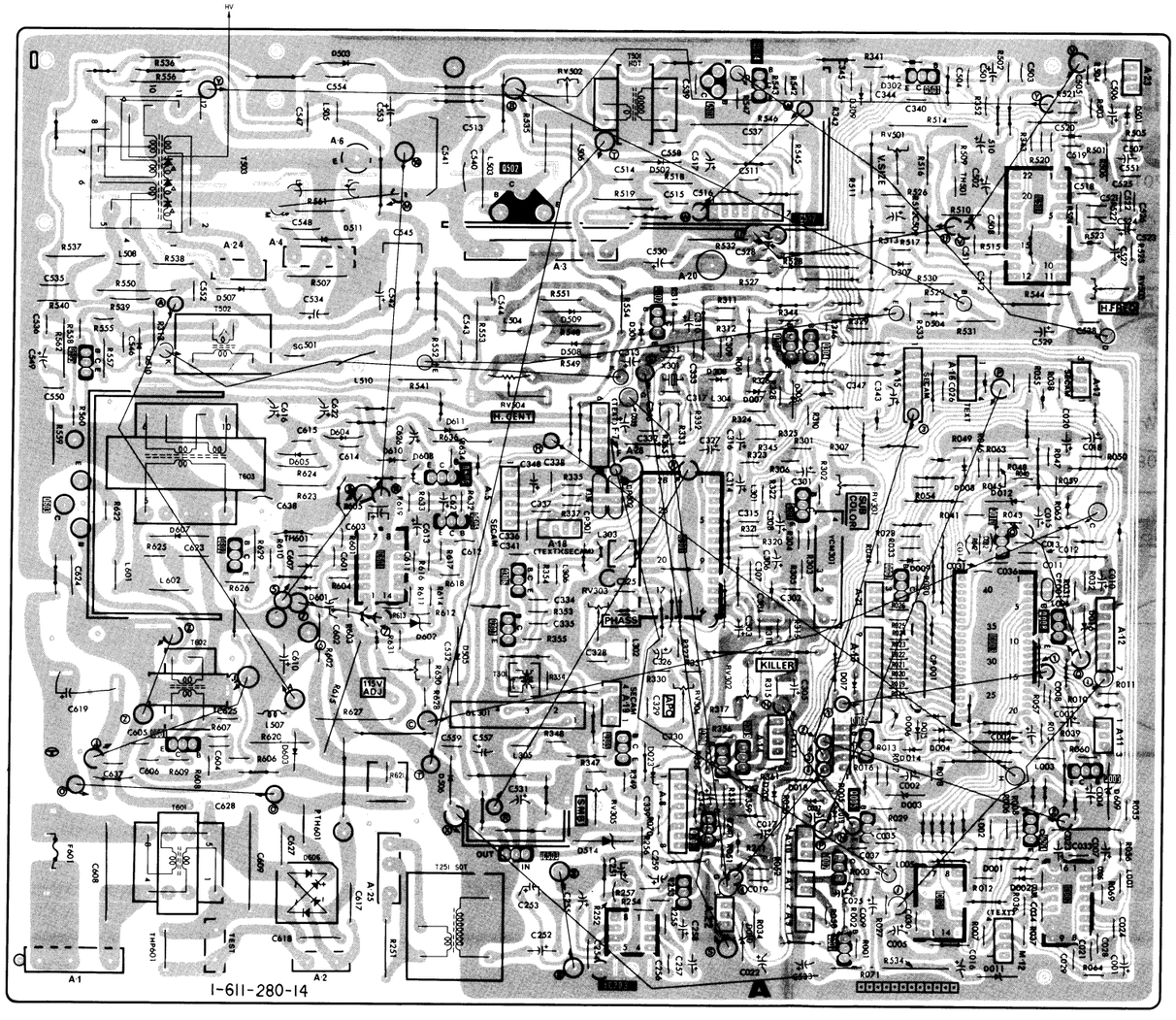
– Conductor Side –

[Y & CHROMA AMP H-V SYNC, POWER SUPPLY, AF OUT, MEMORY, SYSTEM CONTROL] A A

1 2 3 4 5 6 7 8 9 10 11 12 13

– A BOARD –

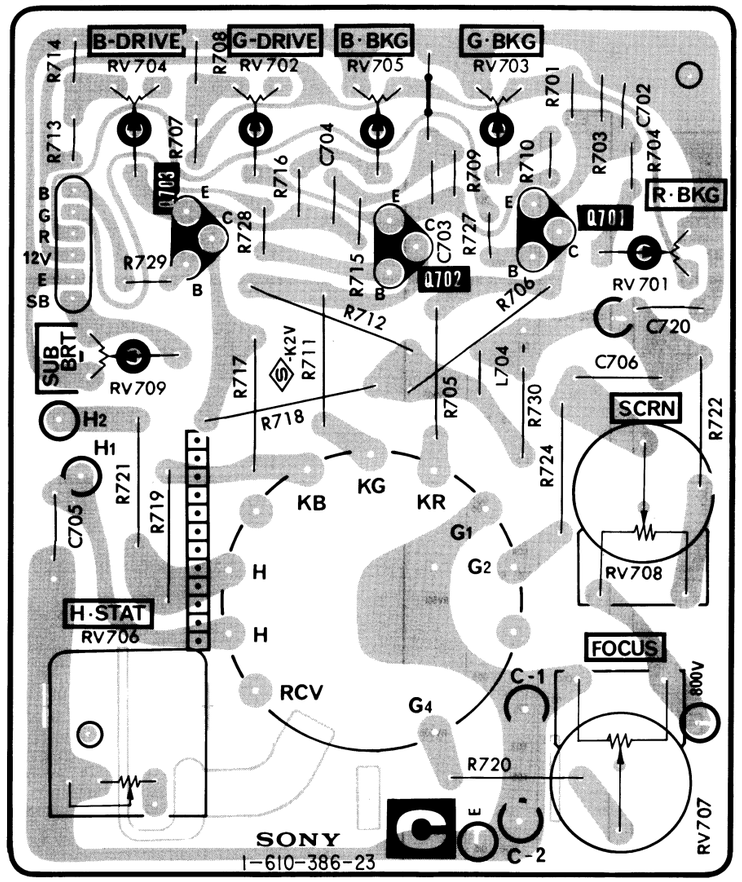
A B C D E F G H I



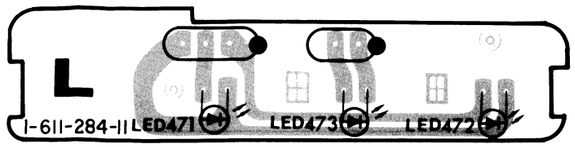
IC , Q	D	ADJ
503 501 504	503 302 309 501	RV502
502 IC502 IC501	502	RV501
302 303 304 505	511 507 509 504 301 510 508	RV503
606 605 IC301 010 602 IC601 306 007 307 008 IC003	611 604 605 610 608 012 607 009 601 602 016 505 017	RV504 RV301 RV303 RV302 RV304
601 305 006 309 308 009	006 603 015 004 014 506 023 609 203 003 027 019	RV305
205 005 004 IC503 002 IC001 IC002 IC203 001	514 001 002 606 001	

IC , Q	D	ADJ

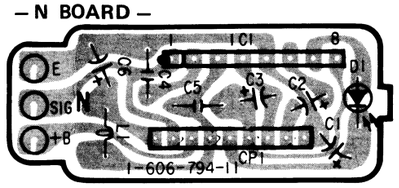
– C BOARD –



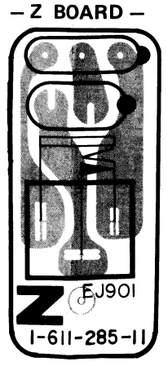
– L BOARD –



– N BOARD –



– Z BOARD –

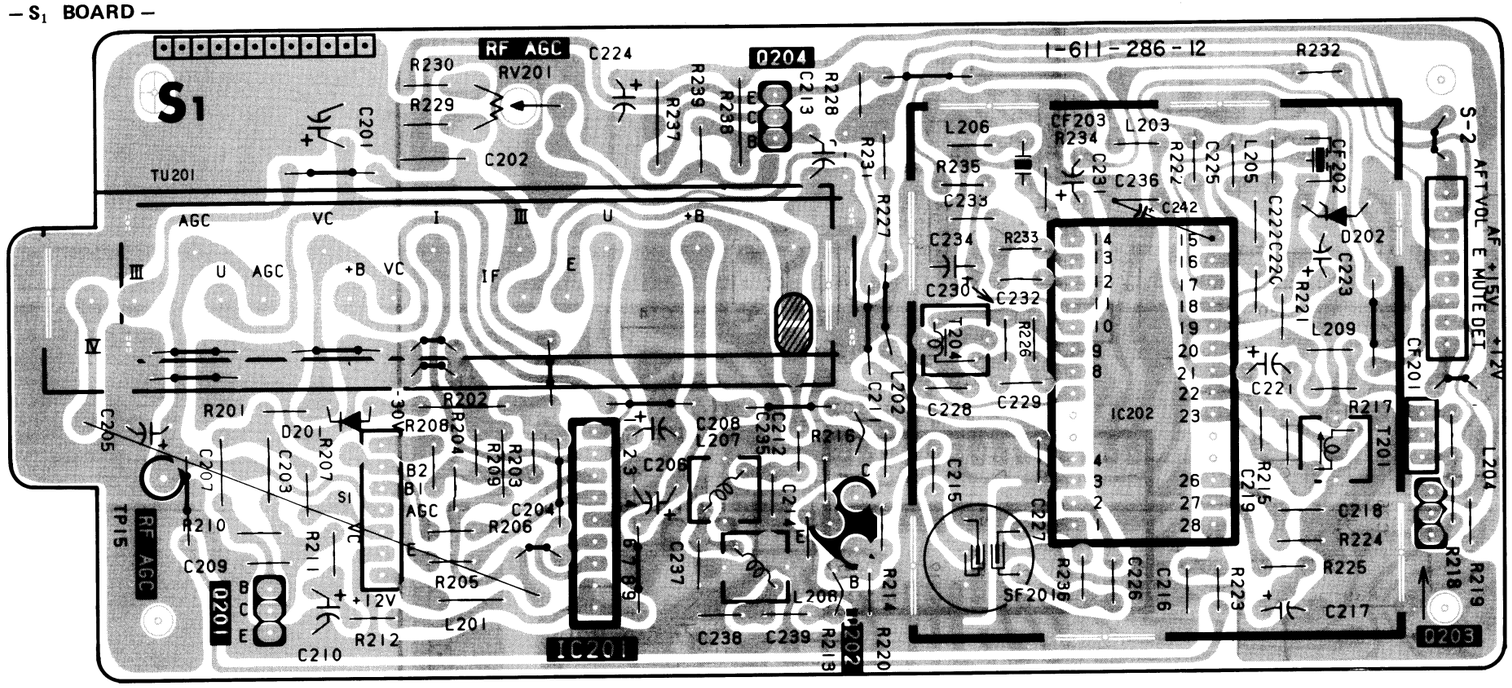


[TUNER, VIF] S1 [CUSTOMER CONTROL] H1 S1 H1

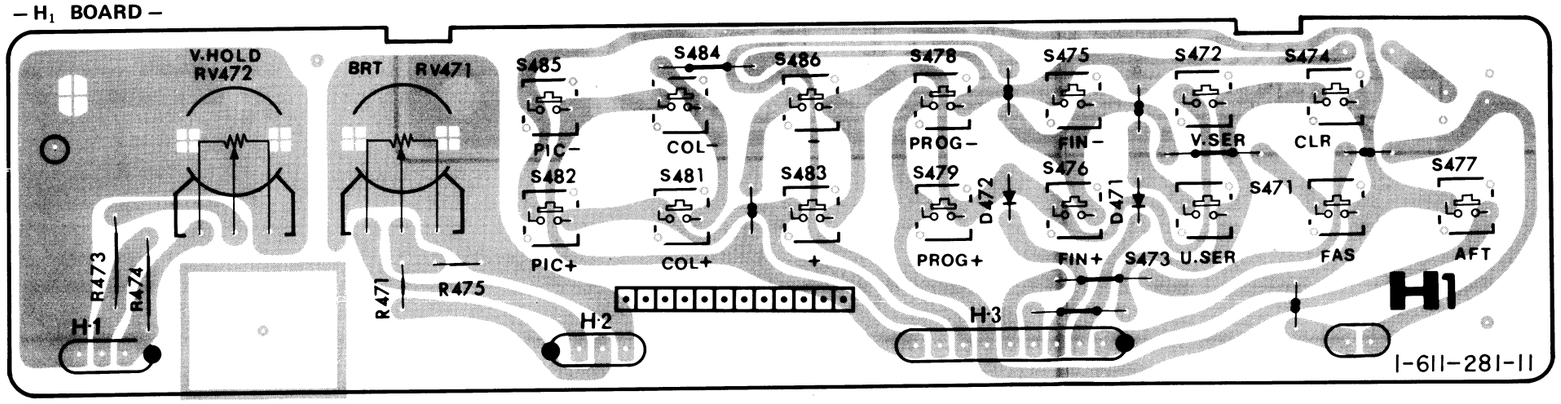
1 2 3 4 5 6 7 8 9 10 11 12 13

A B C D E F G H I

– S_1 BOARD –



– H_1 BOARD –

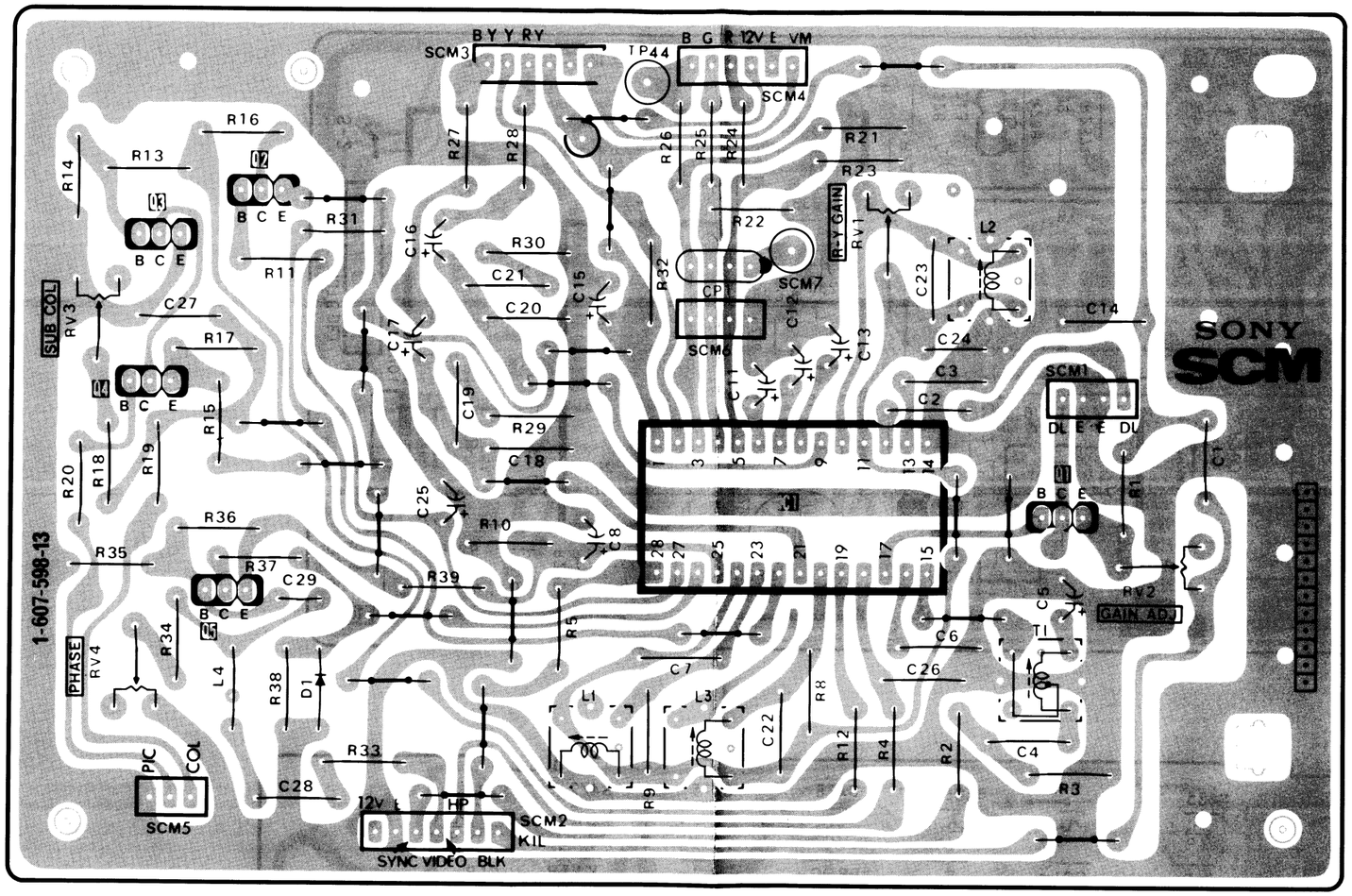


[SCM-KILLER, Y DRIVE
PAL-SECAM TRANSCODER]

1 2 3 4 5 6 7 8 9 10 11 12

A B C D E F G H

– SCM BOARD –



SECTION 2
ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS • MF : μF, PF : μμF

RESISTORS • All resistors are in ohms • F : nonflammable

COILS • MMH : mH, UH : μH

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description			Remark
	*A-1295-565-A	SCM BOARD, COMPLETE **********			
		CAPACITOR			
C1	1-161-330-00	CERAMIC	0.01MF	30% 25V	
C2	1-161-330-00	CERAMIC	0.01MF	30% 25V	
C3	1-161-330-00	CERAMIC	0.01MF	30% 25V	
C4	1-161-272-00	CERAMIC	120PF	5% 50V	
C5	1-123-356-00	ELECT	10MF	20% 16V	
C6	1-161-330-00	CERAMIC	0.01MF	30% 25V	
C7	1-161-269-00	CERAMIC	68PF	5% 50V	
C8	1-123-379-00	ELECT	0.47MF	20% 50V	
C11	1-123-379-00	ELECT	0.47MF	20% 50V	
C12	1-123-379-00	ELECT	0.47MF	20% 50V	
C13	1-123-379-00	ELECT	0.47MF	20% 50V	
C14	1-161-330-00	CERAMIC	0.01MF	30% 25V	
C15	1-123-333-00	ELECT	100MF	20% 16V	
C16	1-123-381-00	ELECT	2.2MF	20% 50V	
C17	1-123-381-00	ELECT	2.2MF	20% 50V	
C18	1-161-271-00	CERAMIC	100PF	5% 50V	
C19	1-161-270-00	CERAMIC	82PF	5% 50V	
C20	1-161-271-00	CERAMIC	100PF	5% 50V	
C21	1-161-270-00	CERAMIC	82PF	5% 50V	
C22	1-161-297-00	CERAMIC	22PF	5% 50V	
C23	1-161-297-00	CERAMIC	22PF	5% 50V	
C24	1-106-220-00	MYLAR	0.1MF	10% 100V	
C25	1-123-381-00	ELECT	2.2MF	20% 50V	
C26	1-161-271-00	CERAMIC	100PF	5% 50V	
C27	1-161-330-00	CERAMIC	0.01MF	30% 25V	
C28	1-161-313-00	CERAMIC	150PF	10% 50V	
C29	1-106-180-00	MYLAR	0.0022MF	10% 100V	
		DIODE			
D1	8-719-815-55	DIODE 1S1555			
		IC			
IC1	8-759-100-15	IC UPC1364C			
		COIL			
L1	1-407-571-00	COIL, VARIABLE 22UH			
L2	1-407-573-00	COIL, VARIABLE 47UH			
L3	1-407-573-00	COIL, VARIABLE 47UH			
L4	1-408-243-00	MICRO INDUCTOR 12MMH			
		TRANSISTOR			
Q1	8-729-204-83	TRANSISTOR 2SA1048GR			
Q2	8-729-204-83	TRANSISTOR 2SA1048GR			
Q3	8-729-245-83	TRANSISTOR 2SC2458			
Q4	8-729-204-83	TRANSISTOR 2SA1048GR			
Q5	8-729-204-83	TRANSISTOR 2SA1048GR			

Ref.No.	Part No.	Description			Remark
		RESISTOR			
R1	1-247-708-11	CARBON	470	5% 1/4W	
R2	1-247-119-00	CARBON	330	5% 1/4W	
R3	1-247-119-00	CARBON	330	5% 1/4W	
R4	1-247-725-11	CARBON	10K	5% 1/4W	
R5	1-247-700-11	CARBON	100	5% 1/4W	
R8	1-247-143-00	CARBON	3.3K	5% 1/4W	
R9	1-247-151-00	CARBON	6.8K	5% 1/4W	
R10	1-246-535-00	CARBON	390K	5% 1/4W	
R11	1-247-167-00	CARBON	33K	5% 1/4W	
R12	1-247-713-11	CARBON	1K	5% 1/4W	
R13	1-247-725-11	CARBON	10K	5% 1/4W	
R14	1-247-718-11	CARBON	2.7K	5% 1/4W	
R15	1-247-167-00	CARBON	33K	5% 1/4W	
R16	1-247-718-11	CARBON	2.7K	5% 1/4W	
R17	1-247-167-00	CARBON	33K	5% 1/4W	
R18	1-247-725-11	CARBON	10K	5% 1/4W	
R19	1-247-171-00	CARBON	47K	5% 1/4W	
R20	1-247-177-00	CARBON	82K	5% 1/4W	
R21	1-247-143-00	CARBON	3.3K	5% 1/4W	
R22	1-247-143-00	CARBON	3.3K	5% 1/4W	
R23	1-247-143-00	CARBON	3.3K	5% 1/4W	
R24	1-247-704-11	CARBON	220	5% 1/4W	
R25	1-247-704-11	CARBON	220	5% 1/4W	
R26	1-247-704-11	CARBON	220	5% 1/4W	
R27	1-247-704-11	CARBON	220	5% 1/4W	
R28	1-247-704-11	CARBON	220	5% 1/4W	
R29	1-247-153-00	CARBON	8.2K	5% 1/4W	
R30	1-247-153-00	CARBON	8.2K	5% 1/4W	
R31	1-247-167-00	CARBON	33K	5% 1/4W	
R32	1-247-145-00	CARBON	3.9K	5% 1/4W	
R33	1-247-143-00	CARBON	3.3K	5% 1/4W	
R34	1-247-717-11	CARBON	2.2K	5% 1/4W	
R35	1-246-545-00	CARBON	1M	5% 1/4W	
R36	1-249-469-11	CARBON	100K	5% 1/4W	
R37	1-247-137-00	CARBON	1.8K	5% 1/4W	
R38	1-247-125-00	CARBON	560	5% 1/4W	
R39	1-246-533-00	CARBON	330K	5% 1/4W	
		VARIABLE RESISTOR			
RV1	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K			
RV2	1-228-717-00	RES, ADJ, CERAMIC CARBON 220			
RV3	1-228-727-00	RES, ADJ, CERAMIC CARBON 47K			
RV4	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K			
		CONNECTOR			
SCM1	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)			
SCM2	*1-560-127-00	PLUG, CONNECTOR (2.5MM PITCH)			
SCM3	*1-560-126-00	PLUG, CONNECTOR (2.5MM PITCH)			
SCM4	*1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P			
SCM5	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)			
SCM6	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)			

Ref.No.	Part No.	Description	Remark
SCM7	*1-508-784-00	1P PLUG	
		TRANSFORMER	
T1	1-404-146-00	TRANSFORMER	
	*A-1296-056-A	A BOARD, COMPLETE **********	
	4-303-483-00	HEAD, WASHER, TAPPING SCREW	
	*4-363-404-00	HOLDER, IC	
	4-363-414-00	SPACER, MICA	
	4-363-414-00	SPACER, MICA	
	4-365-810-11	SCREW (3), TAPPING	
	4-365-810-11	SCREW (3), TAPPING	
	4-365-810-11	SCREW (3), TAPPING	
		CONNECTOR	
A1	*1-506-349-21	3P PLUG (L)	
A2	*1-508-786-00	2P PLUG (M)	
A3	*1-564-038-00	CONNECTOR PLUG, DY (MINI) 6P	
A4	*1-508-765-00	3P PLUG (M)	
A5	*1-560-126-00	PLUG, CONNECTOR (2.5MM PITCH)	
A8	*1-560-128-00	PLUG, CONNECTOR (2.5MM PITCH)	
A10	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
A11	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
A12	*1-560-127-00	PLUG, CONNECTOR (2.5MM) 7P	
A13	*1-560-129-00	PLUG, CONNECTOR (2.5MM) 9P	
A14	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	
A15	*1-560-127-00	PLUG, CONNECTOR (2.5MM PITCH)	
A16	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	
A17	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)	
A18	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	
A19	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	
A20	*1-508-784-00	1P PLUG	
A21	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
A22	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
A23	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
A24	*1-508-786-00	2P PLUG (M)	
A25	*1-508-765-00	3P PLUG (M)	
A26	*1-508-784-00	1P PLUG	
F7	*1-560-126-00	PLUG, CONNECTOR (2.5MM PITCH)	
M12	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	

Ref.No.	Part No.	Description			Remark
		CAPACITOR			
C001	1-123-380-00	ELECT	1MF	20% 50V	
C002	1-123-306-00	ELECT	47MF	20% 10V	
C003	1-123-356-00	ELECT	10MF	20% 16V	
C004	1-123-306-00	ELECT	47MF	20% 10V	
C005	1-123-333-00	ELECT	100MF	20% 16V	
C006	1-102-851-00	CERAMIC	15PF	5% 50V	
C007	1-123-380-00	ELECT	1MF	20% 50V	
C008	1-102-824-00	CERAMIC	470PF	5% 50V	
C010	1-123-381-00	ELECT	2.2MF	20% 50V	
C011	1-102-973-00	CERAMIC	100PF	5% 50V	
C012	1-102-973-00	CERAMIC	100PF	5% 50V	
C013	1-136-165-00	FILM	0.1MF	5% 50V	
C014	1-102-973-00	CERAMIC	100PF	5% 50V	
C015	1-123-356-00	ELECT	10MF	20% 50V	
C016	1-123-380-00	ELECT	1MF	20% 50V	
C017	1-123-380-00	ELECT	1MF	20% 50V	
C018	1-123-381-00	ELECT	2.2MF	20% 50V	
C019	1-101-005-00	CERAMIC	0.022MF	50V	
C020	1-123-381-00	ELECT	2.2MF	20% 50V	
C021	1-102-851-00	CERAMIC	15PF	5% 50V	
C022	1-123-380-00	ELECT	1MF	20% 50V	
C023	1-123-307-00	ELECT	100MF	20% 10V	
C024	1-102-119-00	CERAMIC	0.0015MF	10% 50V	
C026	1-102-125-00	CERAMIC	0.0047MF	10% 50V	
C027	1-123-356-00	ELECT	10MF	20% 16V	
C028	1-102-973-00	CERAMIC	100PF	5% 50V	
C029	1-102-973-00	CERAMIC	100PF	5% 50V	
C031	1-101-004-00	CERAMIC	0.01MF	50V	
C032	1-102-973-00	CERAMIC	100PF	5% 50V	
C033	1-108-587-00	MYLAR	0.022MF	5% 50V	
C035	1-102-125-00	CERAMIC	0.0047MF	10% 50V	
C036	1-102-978-00	CERAMIC	220PF	5% 50V	
C037	1-102-973-00	CERAMIC	100PF	5% 50V	
C038	1-101-004-00	CERAMIC	0.01MF	50V	
C039	1-123-382-00	ELECT	3.3MF	20% 50V	
C251	1-123-318-00	ELECT	33MF	20% 16V	
C252	1-123-364-00	ELECT	1000MF	20% 50V	
C253	1-123-322-00	ELECT	330MF	20% 16V	
C254	1-106-220-00	MYLAR	0.1MF	10% 100V	
C255	1-123-324-00	ELECT	1000MF	20% 16V	
C256	1-102-973-00	CERAMIC	100PF	5% 50V	
C257	1-123-333-00	ELECT	100MF	20% 16V	
C258	1-123-369-00	ELECT	4.7MF	20% 25V	
C259	1-123-356-00	ELECT	10MF	20% 16V	
C301	1-123-356-00	ELECT	10MF	20% 16V	
C302	1-101-004-00	CERAMIC	0.01MF	50V	
C303	1-123-380-00	ELECT	1MF	20% 50V	
C304	1-136-169-00	FILM	0.22MF	5% 50V	
C305	1-123-380-00	ELECT	1MF	20% 50V	
C306	1-123-382-00	ELECT	3.3MF	20% 50V	
C307	1-102-129-00	CERAMIC	0.01MF	10% 50V	
C308	1-123-380-00	ELECT	1MF	20% 50V	
C309	1-106-208-00	MYLAR	0.033MF	10% 100V	
C310	1-123-382-00	ELECT	3.3MF	20% 50V	
C313	1-123-379-00	ELECT	0.47MF	20% 50V	
C314	1-131-371-00	TANTALUM	10MF	20% 16V	
C315	1-102-959-00	CERAMIC	22PF	5% 50V	
C316	1-123-382-00	ELECT	3.3MF	20% 50V	
C317	1-102-852-00	CERAMIC	47PF	5% 50V	
C325	1-102-850-00	CERAMIC	56PF	5% 50V	
C326	1-123-379-00	ELECT	0.47MF	20% 50V	

Ref.No.	Part No.	Description			Remark
C327	1-123-356-00	ELECT	10MF	20%	16V
C328	1-102-887-00	CERAMIC	47PF	5%	50V
C329	1-106-212-00	MYLAR	0.047MF	10%	100V
C330	1-106-212-00	MYLAR	0.047MF	10%	100V
C331	1-102-852-00	CERAMIC	47PF	5%	50V
C332	1-102-513-00	CERAMIC	18PF	5%	50V
C333	1-101-880-00	CERAMIC	47PF	5%	50V
C334	1-102-129-00	CERAMIC	0.01MF	10%	50V
C335	1-102-129-00	CERAMIC	0.01MF	10%	50V
C336	1-102-947-00	CERAMIC	10PF	5%	50V
C337	1-102-947-00	CERAMIC	10PF	5%	50V
C338	1-102-947-00	CERAMIC	10PF	5%	50V
C339	1-102-129-00	CERAMIC	0.01MF	10%	50V
C340	1-106-178-00	MYLAR	0.0018MF	5%	50V
C341	1-102-523-00	CERAMIC	56PF	5%	50V
C342	1-123-356-00	ELECT	10MF	20%	16V
C343	1-123-356-00	ELECT	10MF	20%	16V
C344	1-102-978-00	CERAMIC	220PF	5%	50V
C345	1-106-184-00	MYLAR	0.0033MF	10%	100V
C346	1-102-518-00	CERAMIC	33PF	5%	50V
C348	1-123-356-00	ELECT	10MF	20%	16V
C501	1-123-381-00	ELECT	2.2MF	20%	50V
C502	1-123-321-00	ELECT	220MF	20%	16V
C503	1-106-176-00	MYLAR	0.0015MF	10%	100V
C504	1-106-212-00	MYLAR	0.047MF	10%	100V
C505	1-106-210-00	MYLAR	0.039MF	10%	100V
C506	1-123-380-00	ELECT	1MF	20%	50V
C507	1-123-380-00	ELECT	1MF	20%	50V
C508	1-136-173-00	FILM	0.47MF	5%	50V
C509	1-123-356-00	ELECT	10MF	20%	16V
C511	1-108-587-00	MYLAR	0.022MF	10%	50V
C512	1-108-595-00	MYLAR	0.047MF	5%	50V
C513	1-106-200-00	MYLAR	0.015MF	10%	100V
C514	1-106-196-00	MYLAR	0.01MF	10%	100V
C515	1-106-212-00	MYLAR	0.047MF	10%	100V
C516	1-102-228-00	CERAMIC	470PF	10%	500V
C517	1-123-360-00	ELECT	100MF	20%	50V
C518	1-102-228-00	CERAMIC	470PF	10%	500V
C519	1-106-196-00	MYLAR	0.01MF	10%	100V
C520	1-102-115-00	CERAMIC	560PF	10%	50V
C521	1-106-204-00	MYLAR	0.022MF	10%	100V
C522	1-102-989-00	CERAMIC	68PF	5%	500V
C523	1-123-380-00	ELECT	1MF	20%	50V
C524	1-106-204-00	MYLAR	0.022MF	10%	100V
C525	1-106-180-00	MYLAR	0.0022MF	5%	50V
C526	1-136-147-00	FILM	0.0033MF	5%	50V
C527	1-123-380-00	ELECT	1MF	20%	50V
C528	1-123-381-00	ELECT	2.2MF	20%	50V
C529	1-123-321-00	ELECT	220MF	20%	16V
C530	1-124-190-00	ELECT	680MF	10%	35V
C531	1-123-334-00	ELECT	220MF	20%	25V
C532	1-102-038-00	CERAMIC	0.001MF		500V
C533	1-121-999-00	ELECT	10MF		160V

Ref.No.	Part No.	Description			Remark
C535	1-108-425-00	MYLAR	0.022MF	10%	200V
C536	1-102-038-00	CERAMIC	0.001MF		500V
C537	1-123-228-00	ELECT	1MF	20%	50V
C538	1-136-173-00	FILM	0.47MF	5%	50V
C539	1-102-030-00	CERAMIC	330PF	10%	500V
C540	1-102-327-00	CERAMIC	330PF	15%	1.5KV
C541 ⚠	1-136-061-00	FILM	0.0078MF	3%	2KV
C542	1-123-024-00	ELECT	33MF		160V
C543	1-102-002-00	CERAMIC	680PF	10%	500V
C544	1-102-212-00	CERAMIC	820PF	10%	500V
C545	1-130-684-00	FILM	0.33MF	5%	200V
C546	1-106-200-00	MYLAR	0.015MF	10%	100V
C547	1-136-060-00	FILM	0.047MF	5%	400V
C548	1-102-223-00	CERAMIC	0.0047MF	10%	2KV
C549	1-123-380-00	ELECT	1MF	20%	50V
C550	1-106-204-00	MYLAR	0.022MF	10%	100V
C551	1-106-196-00	MYLAR	0.01MF	10%	100V
C552	1-106-198-00	MYLAR	0.012MF	10%	100V
C553	1-123-349-00	ELECT	1000MF	20%	35V
C554	1-102-038-00	CERAMIC	0.001MF		500V
C556	1-123-005-00	ELECT	22MF		250V
C557	1-123-323-00	ELECT	470MF	20%	16V
C558	1-106-343-00	MYLAR	0.001MF	10%	200V
C601	1-123-021-00	ELECT	0.47MF	30%	50V
C602	1-123-381-00	ELECT	2.2MF	20%	50V
C603	1-123-382-00	ELECT	3.3MF	20%	50V
C604	1-106-204-00	MYLAR	0.022MF	10%	100V
C605	1-106-359-00	MYLAR	0.0047MF	10%	200V
C606	1-102-030-00	CERAMIC	330PF	10%	500V
C607	1-102-973-00	CERAMIC	100PF	5%	50V
C608 ⚠	1-130-238-00	MYLAR	0.22MF	20%	300V
C609 ⚠	1-130-238-00	MYLAR	0.22MF	20%	300V
C610	1-123-024-00	ELECT	33MF		160V
C611	1-106-180-00	MYLAR	0.0022MF	5%	50V
C612	1-101-810-00	CERAMIC	100PF	5%	500V
C614	1-102-030-00	CERAMIC	330PF	10%	500V
C615	1-102-030-00	CERAMIC	330PF	10%	500V
C616	1-123-324-00	ELECT	1000MF	20%	16V
C617 ⚠	1-161-964-00	CERAMIC	0.0047MF		250V
C618 ⚠	1-161-964-00	CERAMIC	0.0047MF		250V
C619	1-125-318-00	ELECT(BLOCK)	220MF	20%	400V
C621	1-123-379-00	ELECT	0.47MF	20%	50V
C622	1-123-335-00	ELECT	330MF	20%	25V
C623	1-161-731-00	CERAMIC	0.001MF	10%	2KV
C624	1-102-050-00	CERAMIC	0.01MF		500V
C625	1-102-038-00	CERAMIC	0.001MF		500V
C626	1-123-335-00	ELECT	330MF	20%	25V
C627	1-161-964-00	CERAMIC	0.0047MF		250V
C628	1-161-830-00	CERAMIC	0.0047MF		500V
C637	1-102-038-00	CERAMIC	0.001MF		500V
C638	1-106-208-00	MYLAR	0.033MF	10%	100V
C6423	1-123-024-00	ELECT	33MF		160V

Ref.No.	Part No.	Description	Remark
		FILTER	
CF001	1-527-790-00	OSCILLATOR, CERAMIC	
		DIODE	
D001	8-719-911-19	DIODE 1SS119	
D002	8-719-911-19	DIODE 1SS119	
D003	8-719-101-35	DIODE RD3.0E-L2	
D004	8-719-911-19	DIODE 1SS119	
D005	8-719-911-19	DIODE 1SS119	
D006	8-719-911-19	DIODE 1SS119	
D009	8-719-911-19	DIODE 1SS119	
D010	8-719-100-61	DIODE RD11E-B2	
D011	8-719-101-02	DIODE RD30E-B4	
D012	8-759-157-40	IC UPC574J	
D014	8-719-911-19	DIODE 1SS119	
D015	8-719-911-19	DIODE 1SS119	
D016	8-719-100-35	DIODE RD5.6E-B2	
D018	8-719-911-19	DIODE 1SS119	
D019	8-719-911-19	DIODE 1SS119	
D023	8-719-815-55	DIODE 1S1555	
D203	8-719-911-19	DIODE 1SS119	
D301	8-719-911-19	DIODE 1SS119	
D302	8-719-911-19	DIODE 1SS119	
D305	8-719-100-22	DIODE RD4.3E-B1	
D306	8-719-911-19	DIODE 1SS119	
D307	8-719-911-19	DIODE 1SS119	
D308	8-719-911-19	DIODE 1SS119	
D501	8-719-911-19	DIODE 1SS119	
D502	8-719-924-06	DIODE ERC24-06S	
D503	8-719-924-06	DIODE ERC24-06S	
D504	8-719-911-19	DIODE 1SS119	
D505	8-719-924-06	DIODE ERC24-06S	
D506	8-719-200-02	DIODE 10E2	
D507	8-719-924-06	DIODE ERC24-06S	
D508	8-719-911-55	DIODE U05G	
D509	8-719-911-55	DIODE U05G	
D510	8-719-911-55	DIODE U05G	
D511	8-719-300-65	DIODE ES1F	
D514	8-719-931-05	DIODE EQB01-05	
D601	8-719-911-19	DIODE 1SS119	
D602	8-719-102-74	DIODE RD6.2E-N2	
D603	8-719-911-55	DIODE U05G	
D604	8-719-924-06	DIODE ERC24-06S	
D605	8-719-982-04	DIODE ERB81-004	
D606	8-719-503-06	DIODE S3WB60Z	
D607	8-719-925-06	DIODE ERC25-06S	
D608	8-719-911-19	DIODE 1SS119	
D609	8-719-160-23	DIODE RD5.1F-B2	
D610	8-719-911-19	DIODE 1SS119	
D611	8-719-911-19	DIODE 1SS119	

Ref.No.	Part No.	Description	Remark
		DELAY LINE	
DL301	1-415-122-31	DELAY LINE, 1H (PAL)	
		FUSE	
F601 ⚠	1-532-350-00	FUSE, TIME-LAG 4A	
	1-533-087-00	HOLDER, FUSE; F601	
		IC	
IC001	8-759-600-92	IC M58657P	
IC002	8-759-600-62	IC M50143-002P	
IC003	8-759-600-89	IC CX523-013P	
IC203	8-759-157-52	IC UPC575C	
IC301	8-759-113-65	IC UPC1365C	
IC501	8-759-100-60	IC UPC1377C	
IC502	8-759-113-78	IC UPC1378H-L	
IC503	8-759-700-06	IC NJM7812B	
	*4-323-833-00	HEAT SINK, PIN OUT; IC503	
IC601	8-759-100-75	IC UPC1394C	
		COIL	
L001	1-408-413-00	MICRO INDUCTOR 22UH	
L002	1-408-428-00	MICRO INDUCTOR 390UH	
L004	1-407-179-00	MICRO INDUCTOR 1.2UH	
L005	1-408-411-00	MICRO INDUCTOR 15UH	
L301	1-408-409-00	MICRO INDUCTOR 10UH	
L302	1-408-415-00	MICRO INDUCTOR 33UH	
L303	1-408-942-00	MICRO INDUCTOR 3.3MMH	
	*4-368-180-01	CAP, SHIELD; L303	
L304	1-407-501-00	MICRO INDUCTOR 5.6MMH	
L305	1-408-408-00	MICRO INDUCTOR 8.2UH	
L306	1-408-414-00	MICRO INDUCTOR 27UH	
L503	1-408-349-00	COIL, CHOKE	
L504	1-407-496-00	MICRO INDUCTOR 2.2MMH	
L505	1-407-496-00	MICRO INDUCTOR 2.2MMH	
L506	1-407-366-00	RF CHOKE COIL	
L507	1-459-215-00	CORE COIL	
L508	1-459-404-00	COIL (WITH CORE)	
L510	1-459-348-00	COIL, VAR, FERRITE (HWC)	
L601	1-407-365-00	COIL, CHOKE (HIGH FREQUENCY)	
L602	1-408-300-00	MICRO INDUCTOR 6.8UH	
L603	1-407-365-00	COIL, CHOKE	
		THERMISTOR	
PTH601	1-800-820-00	THERMISTOR, POWER	
TH501	1-806-213-00	THERMISTOR	
TH601	1-800-202-XX	THERMISTOR S-10K	
THP601 ⚠	1-806-165-00	THERMISTOR (POSITIVE)	
		TRANSISTOR	
Q004	8-729-245-83	TRANSISTOR 2SC2458	
Q005	8-729-245-83	TRANSISTOR 2SC2458	
Q006	8-729-204-83	TRANSISTOR 2SA1048GR	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description				Remark
Q007	8-729-245-83	TRANSISTOR 2SC2458				
Q008	8-729-245-83	TRANSISTOR 2SC2458				
Q009	8-729-245-83	TRANSISTOR 2SC2458				
Q010	8-729-600-24	TRANSISTOR 2SC403SP-51				
Q205	8-729-245-83	TRANSISTOR 2SC2458				
Q252	8-729-245-83	TRANSISTOR 2SC2458				
Q301	8-729-245-83	TRANSISTOR 2SC2458				
Q302	8-729-245-83	TRANSISTOR 2SC2458				
Q303	8-729-245-83	TRANSISTOR 2SC2458				
Q304	8-729-245-83	TRANSISTOR 2SC2458				
Q305	8-729-204-83	TRANSISTOR 2SA1048GR				
Q306	8-729-245-83	TRANSISTOR 2SC2458				
Q307	8-729-245-83	TRANSISTOR 2SC2458				
Q308	8-729-245-83	TRANSISTOR 2SC2458				
Q309	8-729-245-83	TRANSISTOR 2SC2458				
Q501	8-729-245-83	TRANSISTOR 2SC2458				
Q502	8-729-800-35	TRANSISTOR 2SD1397				
Q503	8-729-168-82	TRANSISTOR 2SC2688				
Q504	8-729-245-83	TRANSISTOR 2SC2458				
Q505	8-729-378-91	TRANSISTOR 2SD789				
Q601	8-729-195-82	TRANSISTOR 2SC2958				
Q602	8-729-163-93	TRANSISTOR 2SA639S				
Q603	8-729-801-69	TRANSISTOR 2SC3153				
	*4-370-012-01	HOLDER, TRANSISTOR; Q603				
Q605	8-729-204-83	TRANSISTOR 2SA1048GR				
Q606	8-729-245-83	TRANSISTOR 2SC2458				
		RESISTOR				
R005	1-249-419-11	CARBON	1.5K	5%	1/6W	
R006	1-247-863-00	CARBON	22K	5%	1/6W	
R007	1-247-831-00	CARBON	1K	5%	1/6W	
R008	1-247-875-00	CARBON	68K	5%	1/6W	
R010	1-247-831-00	CARBON	1K	5%	1/6W	
R011	1-247-863-00	CARBON	22K	5%	1/6W	
R012	1-247-863-00	CARBON	22K	5%	1/6W	
R013	1-247-831-00	CARBON	1K	5%	1/6W	
R014	1-247-831-00	CARBON	1K	5%	1/6W	
R015	1-247-831-00	CARBON	1K	5%	1/6W	
R016	1-247-863-00	CARBON	22K	5%	1/6W	
R017	1-247-831-00	CARBON	1K	5%	1/6W	
R018	1-247-847-00	CARBON	4.7K	5%	1/6W	
R019	1-247-831-00	CARBON	1K	5%	1/6W	
R020	1-247-831-00	CARBON	1K	5%	1/6W	
R021	1-247-831-00	CARBON	1K	5%	1/6W	
R022	1-247-831-00	CARBON	1K	5%	1/6W	
R023	1-247-831-00	CARBON	1K	5%	1/6W	
R024	1-247-831-00	CARBON	1K	5%	1/6W	
R025	1-247-814-00	CARBON	200	5%	1/6W	
R026	1-247-814-00	CARBON	200	5%	1/6W	
R029	1-249-429-11	CARBON	10K	5%	1/6W	
R030	1-247-847-00	CARBON	4.7K	5%	1/6W	
R031	1-247-867-00	CARBON	33K	5%	1/6W	
R032	1-247-867-00	CARBON	33K	5%	1/6W	

Ref.No.	Part No.	Description				Remark
R033	1-249-429-11	CARBON	10K	5%	1/6W	
R034 ⚠	1-246-991-00	CARBON	150	5%	1/8W	F
R035	1-249-437-11	CARBON	47K	5%	1/6W	
R036	1-247-863-00	CARBON	22K	5%	1/6W	
R037	1-247-831-00	CARBON	1K	5%	1/6W	
R038	1-249-429-11	CARBON	10K	5%	1/6W	
R039	1-247-863-00	CARBON	22K	5%	1/6W	
R040	1-247-863-00	CARBON	22K	5%	1/6W	
R041	1-247-863-00	CARBON	22K	5%	1/6W	
R042	1-247-863-00	CARBON	22K	5%	1/6W	
R043	1-247-863-00	CARBON	22K	5%	1/6W	
R044	1-249-434-11	CARBON	27K	5%	1/6W	
R045	1-247-861-00	CARBON	18K	5%	1/6W	
R046	1-249-434-11	CARBON	27K	5%	1/6W	
R047	1-249-429-11	CARBON	10K	5%	1/6W	
R048	1-247-861-00	CARBON	18K	5%	1/6W	
R049	1-247-845-00	CARBON	3.9K	5%	1/6W	
R050	1-249-434-11	CARBON	27K	5%	1/6W	
R051	1-247-863-00	CARBON	22K	5%	1/6W	
R052	1-247-877-00	CARBON	82K	5%	1/6W	
R053	1-247-831-00	CARBON	1K	5%	1/6W	
R054	1-247-879-00	CARBON	100K	5%	1/6W	
R055	1-247-872-00	CARBON	51K	5%	1/6W	
R056	1-247-867-00	CARBON	33K	5%	1/6W	
R057	1-247-859-00	CARBON	15K	5%	1/6W	
R059	1-206-692-00	METAL OXIDE	15K	5%	2W	F
R060	1-247-863-00	CARBON	22K	5%	1/6W	
R062	1-247-861-00	CARBON	18K	5%	1/6W	
R063	1-247-861-00	CARBON	18K	5%	1/6W	
R064	1-247-807-00	CARBON	100	5%	1/6W	
R070	1-249-437-11	CARBON	47K	5%	1/6W	
R071	1-247-895-00	CARBON	470K	5%	1/6W	
R073	1-247-819-00	CARBON	330	5%	1/6W	
R240	1-247-843-00	CARBON	3.3K	5%	1/6W	
R241	1-247-877-00	CARBON	82K	5%	1/6W	
R251	1-247-232-00	CARBON	470	5%	1/2W	
R252	1-249-419-11	CARBON	1.5K	5%	1/6W	
R253	1-247-883-00	CARBON	150K	5%	1/6W	
R254	1-249-437-11	CARBON	47K	5%	1/6W	
R255	1-247-881-00	CARBON	120K	5%	1/6W	
R256	1-247-725-11	CARBON	10K	5%	1/4W	
R257	1-247-863-00	CARBON	22K	5%	1/6W	
R301	1-247-831-00	CARBON	1K	5%	1/6W	
R302	1-247-817-00	CARBON	270	5%	1/6W	
R303	1-249-419-11	CARBON	1.5K	5%	1/6W	
R304	1-249-419-11	CARBON	1.5K	5%	1/6W	
R305	1-247-843-00	CARBON	3.3K	5%	1/6W	
R306	1-247-861-00	CARBON	18K	5%	1/6W	
R307	1-247-857-00	CARBON	12K	5%	1/6W	
R310	1-249-429-11	CARBON	10K	5%	1/6W	
R311	1-247-863-00	CARBON	22K	5%	1/6W	
R312	1-247-857-00	CARBON	12K	5%	1/6W	

Ref.No.	Part No.	Description				Remark
R313	1-247-708-11	CARBON	470	5%	1/4W	
R314	1-247-863-00	CARBON	22K	5%	1/6W	
R315	1-247-843-00	CARBON	3.3K	5%	1/6W	
R317	1-249-419-11	CARBON	1.5K	5%	1/6W	
R318	1-247-887-00	CARBON	220K	5%	1/6W	
R319	1-247-877-00	CARBON	82K	5%	1/6W	
R320	1-247-831-00	CARBON	1K	5%	1/6W	
R321	1-247-831-00	CARBON	1K	5%	1/6W	
R322	1-247-825-00	CARBON	560	5%	1/6W	
R323	1-247-807-00	CARBON	100	5%	1/6W	
R325	1-247-885-00	CARBON	180K	5%	1/6W	
R326	1-247-849-00	CARBON	5.6K	5%	1/6W	
R327	1-249-421-11	CARBON	2.2K	5%	1/6W	
R328	1-247-831-00	CARBON	1K	5%	1/6W	
R329	1-247-829-00	CARBON	820	5%	1/6W	
R330	1-249-434-11	CARBON	27K	5%	1/6W	
R331	1-249-434-11	CARBON	27K	5%	1/6W	
R332	1-247-829-00	CARBON	820	5%	1/6W	
R333	1-247-831-00	CARBON	1K	5%	1/6W	
R334	1-247-827-00	CARBON	680	5%	1/6W	
R335	1-247-799-00	CARBON	47	5%	1/6W	
R336	1-247-799-00	CARBON	47	5%	1/6W	
R337	1-247-799-00	CARBON	47	5%	1/6W	
R341	1-247-831-00	CARBON	1K	5%	1/6W	
R342	1-247-850-00	CARBON	6.2K	5%	1/6W	
R343	1-247-815-00	CARBON	220	5%	1/6W	
R344	1-247-807-00	CARBON	100	5%	1/6W	
R345	1-249-429-11	CARBON	10K	5%	1/6W	
R346	1-249-429-11	CARBON	10K	5%	1/6W	
R347	1-247-815-00	CARBON	220	5%	1/6W	
R348	1-247-821-00	CARBON	390	5%	1/6W	
R349	1-247-815-00	CARBON	220	5%	1/6W	
R352	1-247-831-00	CARBON	1K	5%	1/6W	
R353	1-247-831-00	CARBON	1K	5%	1/6W	
R354	1-247-828-00	CARBON	750	5%	1/6W	
R355	1-247-831-00	CARBON	1K	5%	1/6W	
R356	1-247-851-00	CARBON	6.8K	5%	1/6W	
R357	1-247-851-00	CARBON	6.8K	5%	1/6W	
R358	1-247-831-00	CARBON	1K	5%	1/6W	
R359	1-249-419-11	CARBON	1.5K	5%	1/6W	
R360	1-247-831-00	CARBON	1K	5%	1/6W	
R362	1-247-828-00	CARBON	750	5%	1/6W	
R365	1-247-851-00	CARBON	6.8K	5%	1/6W	
R501	1-247-817-00	CARBON	270	5%	1/6W	
R502	1-247-817-00	CARBON	270	5%	1/6W	
R503	1-247-845-00	CARBON	3.9K	5%	1/6W	
R504	1-247-841-00	CARBON	2.7K	5%	1/6W	
R505	1-247-873-00	CARBON	56K	5%	1/6W	
R506	1-214-763-00	METAL	27K	1%	1/4W	
R507	1-202-847-00	SOLID	560K		1/2W	
R509	1-247-769-00	CARBON	2.7	5%	1/6W	
R510	1-214-771-00	METAL	56K	1%	1/4W	
R511	1-247-833-00	CARBON	1.2K	5%	1/6W	

Ref.No.	Part No.	Description				Remark
R512	1-247-843-00	CARBON	3.3K	5%	1/6W	
R513	1-247-850-00	CARBON	6.2K	5%	1/6W	
R514	1-206-640-00	METAL OXIDE	100	5%	2W	F
R515	1-247-847-00	CARBON	4.7K	5%	1/6W	
R516	1-214-768-00	METAL	43K	1%	1/4W	
R517	1-247-829-00	CARBON	820	5%	1/6W	
R518	1-247-783-00	CARBON	10	5%	1/8W	F
R519	1-247-226-00	CARBON	270	5%	1/2W	
R520	1-247-847-00	CARBON	4.7K	5%	1/6W	
R521	1-249-429-11	CARBON	10K	5%	1/6W	
R522	1-247-877-00	CARBON	82K	5%	1/6W	
R523	1-247-843-00	CARBON	3.3K	5%	1/6W	
R524	1-247-868-00	CARBON	36K	5%	1/6W	
R525	1-247-857-00	CARBON	12K	5%	1/6W	
R526	1-247-829-00	CARBON	820	5%	1/6W	
R527	1-247-853-00	CARBON	8.2K	5%	1/6W	
R528	1-247-857-00	CARBON	12K	5%	1/6W	
R529	1-247-877-00	CARBON	82K	5%	1/6W	
R530	1-213-158-00	METAL OXIDE	18K	5%	1W	F
R531	1-247-127-00	CARBON	680	5%	1/4W	
R532	1-212-364-00	METAL OXIDE	2.2	5%	1W	F
R533	1-249-421-11	CARBON	2.2K	5%	1/6W	
R534	1-206-745-00	METAL OXIDE	6.8K	5%	3W	F
R535 ⚠	1-246-994-00	CARBON	680	5%	1/8W	F
R536 ⚠	1-247-636-00	CARBON	0.47	5%	1/8W	F
R537	1-202-830-00	SOLID	10K		1/2W	
R538 ⚠	1-210-859-00	CARBON	1.2	5%	1/8W	F
R539	1-246-528-00	CARBON	200K	5%	1/4W	
R540	1-247-151-00	CARBON	6.8K	5%	1/4W	
R541	1-202-830-00	SOLID	10K		1/2W	
R542	1-249-437-11	CARBON	47K	5%	1/6W	
R543	1-247-847-00	CARBON	4.7K	5%	1/6W	
R544	1-247-809-00	CARBON	120	5%	1/6W	
R545	1-246-535-00	CARBON	390K	5%	1/4W	
R546	1-206-735-61	METAL OXIDE	2.7K	5%	3W	F
R547	1-247-827-00	CARBON	680	5%	1/6W	
R548	1-212-372-00	METAL OXIDE	10	5%	1W	F
R549	1-212-372-00	METAL OXIDE	10	5%	1W	F
R550	1-206-463-00	METAL OXIDE	10	5%	2W	F
R551	1-247-839-00	CARBON	2.2K	5%	1/8W	F
R552	1-247-863-00	CARBON	22K	5%	1/6W	
R553	1-213-139-00	METAL OXIDE	470	5%	1W	F
R554 ⚠	1-217-371-00	FUSIBLE	0.47	10%	1/4W	F
R555	1-247-845-00	CARBON	3.9K	5%	1/6W	
R556	1-212-372-00	METAL OXIDE	10	5%	1W	F
R557	1-246-988-00	CARBON	56	5%	1/8W	F
R558	1-247-867-00	CARBON	33K	5%	1/6W	
R559	1-213-130-00	METAL OXIDE	82	5%	1W	F
R560	1-247-849-00	CARBON	5.6K	5%	1/6W	
R561 ⚠	1-247-831-00	CARBON	1K	5%	1/8W	F
R562	1-202-826-00	SOLID	4.7K		1/2W	
R601	1-249-429-11	CARBON	10K	5%	1/6W	
R602	1-202-463-00	SOLID	2.2M	5%	1/4W	

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Ref.No.	Part No.	Description				Remark
R603	1-249-434-11	CARBON	27K	5%	1/6W	
R604	1-249-429-11	CARBON	10K	5%	1/6W	
R605	1-247-879-00	CARBON	100K	5%	1/6W	
R606	1-247-829-00	CARBON	820	5%	1/6W	
R607	1-247-825-00	CARBON	560	5%	1/6W	
R608	1-247-889-00	CARBON	270K	5%	1/6W	
R609	1-247-851-00	CARBON	6.8K	5%	1/6W	
R610	1-247-873-00	CARBON	56K	5%	1/6W	
R611	1-247-891-00	CARBON	330K	5%	1/6W	
R612	1-249-437-11	CARBON	47K	5%	1/6W	
R613	1-249-437-11	CARBON	47K	5%	1/6W	
R614	1-247-819-00	CARBON	330	5%	1/6W	
R615	1-215-684-11	METAL OXIDE	100K	5%	3W	F
R616	1-247-869-00	CARBON	39K	5%	1/6W	
R617	1-247-885-00	CARBON	180K	5%	1/6W	
R618	1-247-879-00	CARBON	100K	5%	1/6W	
R619	1-247-825-00	CARBON	560	5%	1/6W	
R620	1-213-159-00	METAL OXIDE	22K	5%	1W	F
R621	1-205-687-00	CEMENTED	54K	10%	7W	
R622	1-247-805-00	CARBON	82	5%	1/6W	
R623 ⚠	1-217-465-00	FUSIBLE	0.47	5%	1W	F
R624 ⚠	1-217-465-00	FUSIBLE	0.47	5%	1W	F
R625	1-247-831-00	CARBON	1K	5%	1/6W	
R626	1-217-194-00	WIREWOUND	0.33	10%	2W	F
R627	1-246-546-00	CARBON	8.2M	10%	1/2W	
R628	1-247-879-00	CARBON	100K	5%	1/6W	
R629	1-247-855-00	CARBON	10K	5%	1/8W	
R630	1-247-829-00	CARBON	820	5%	1/6W	
R631	1-247-840-00	CARBON	2.4K	5%	1/6W	
R632	1-249-429-11	CARBON	10K	5%	1/6W	
R633	1-247-873-00	CARBON	56K	5%	1/6W	
R634	1-249-437-11	CARBON	47K	5%	1/6W	
R636	1-217-578-00	FUSIBLE	22	5%	1W	

VARIABLE RESISTOR

RV301	1-228-724-00	RES, ADJ, CERAMIC CARBON 10K	
RV302	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K	
RV303	1-228-721-00	RES, ADJ, CERAMIC CARBON 2.2K	
RV304	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K	
RV305	1-228-719-00	RES, ADJ, CERAMIC CARBON 470	
RV501	1-228-717-00	RES, ADJ, CERAMIC CARBON 220	
RV502	1-224-250-XX	RES, ADJ, METAL GLAZE 2.2K	
RV503	1-228-160-11	RES, ADJ, METAL GLAZE 5K	
RV504	1-223-102-00	RES, ADJ, WIREWOUND 120	
RV601	1-228-721-00	RES, ADJ, CERAMIC CARBON 2.2K	

SPARK GAP

SG501	1-519-063-XX	DISCHARGING GAP

TRANSFORMER

T251 ⚠	1-427-541-11	TRANSFORMER, OUTPUT
T301	1-426-121-00	DAT
T501	1-437-078-00	TRANSFORMER, HORIZONTAL DRIVE
T502	1-421-268-00	H.PCT
T503 ⚠	1-439-311-21	TRANSFORMER ASSY, FLYBACK
T601 ⚠	1-421-582-00	TRANSFORMER, FERRITE
T602	1-446-194-00	TRANSFORMER, CHOPPER DRIVE
T603	1-421-559-00	TRANSFORMER, FERRITE (S.R.T)

CRYSTAL

X301	1-527-345-00	CRYSTAL, OSC

MODULE

YCM301	1-235-268-00	MODULE

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*1-611-281-11 H1 BOARD
****

DIODE

D471	8-719-911-19	DIODE 1SS119
D472	8-719-911-19	DIODE 1SS119

RESISTOR

R471	1-247-895-00	CARBON	470K	5%	1/6W
R473	1-214-783-00	METAL	180K	1%	1/4W
R474	1-214-769-00	METAL	47K	1%	1/4W
R475	1-247-845-00	CARBON	3.9K	5%	1/6W

VARIABLE RESISTOR

RV471	1-228-539-00	RES, VAR, CARBON 10K
RV472	1-228-583-00	RES, VAR, CARBON 20K

SWITCH

S471	1-553-329-00	SWITCH, PUSH (MONO KEY)
S472	1-553-329-00	SWITCH, PUSH (MONO KEY)
S473	1-553-329-00	SWITCH, PUSH (MONO KEY)
S474	1-553-329-00	SWITCH, PUSH (MONO KEY)
S475	1-553-329-00	SWITCH, PUSH (MONO KEY)
S476	1-553-329-00	SWITCH, PUSH (MONO KEY)
S477	1-553-329-00	SWITCH, PUSH (MONO KEY)
S478	1-553-329-00	SWITCH, PUSH (MONO KEY)
S479	1-553-329-00	SWITCH, PUSH (MONO KEY)
S481	1-553-329-00	SWITCH, PUSH (MONO KEY)
S482	1-553-329-00	SWITCH, PUSH (MONO KEY)
S483	1-553-329-00	SWITCH, PUSH (MONO KEY)
S484	1-553-329-00	SWITCH, PUSH (MONO KEY)
S485	1-553-329-00	SWITCH, PUSH (MONO KEY)
S486	1-553-329-00	SWITCH, PUSH (MONO KEY)

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Ref.No.	Part No.	Description				Remark
	*A-1330-478-A	C BOARD, COMPLETE				
		**********				
	1-526-762-00	SOCKET, CRT				
	*4-365-803-00	COVER (MAIN), CV CONTROL				
	*4-365-804-00	COVER (REAR LID), CV CONTROL				

CAPACITOR

C702	1-102-820-00	CERAMIC	330PF	5%	50V
C703	1-102-978-00	CERAMIC	220PF	5%	50V
C704	1-102-978-00	CERAMIC	220PF	5%	50V
C705	1-102-249-00	CERAMIC	680PF	20%	2KV
C706	1-129-714-00	FILM	0.01MF	20%	630V
C720	1-102-155-00	CERAMIC	330PF	20%	2KV

COIL

L701	1-407-681-00	MICRO INDUCTOR 1UH
L704	1-408-424-00	MICRO INDUCTOR 180UH

TRANSISTOR

Q701	8-729-326-11	TRANSISTOR 2SC2611
Q702	8-729-326-11	TRANSISTOR 2SC2611
Q703	8-729-326-11	TRANSISTOR 2SC2611

RESISTOR

R701	1-247-852-00	CARBON	7.5K	5%	1/6W	
R703	1-247-817-00	CARBON	270	5%	1/6W	
R704	1-249-421-11	CARBON	2.2K	5%	1/6W	
R705	1-202-824-00	SOLID	3.3K		1/2W	
R706	1-206-690-00	METAL OXIDE	12K	5%	2W	F
R707	1-247-846-00	CARBON	4.3K	5%	1/6W	
R708	1-247-826-00	CARBON	620	5%	1/6W	
R709	1-247-821-00	CARBON	390	5%	1/6W	
R710	1-249-421-11	CARBON	2.2K	5%	1/6W	
R711	1-202-824-00	SOLID	3.3K		1/2W	
R712	1-206-690-00	METAL OXIDE	12K	5%	2W	F
R713	1-247-846-00	CARBON	4.3K	5%	1/6W	
R714	1-247-826-00	CARBON	620	5%	1/6W	
R715	1-247-822-00	CARBON	430	5%	1/6W	
R716	1-249-421-11	CARBON	2.2K	5%	1/6W	
R717	1-202-824-00	SOLID	3.3K		1/2W	
R718	1-206-690-00	METAL OXIDE	12K	5%	2W	F
R719	1-202-842-51	SOLID	220K		1/2W	
R720	1-202-719-00	SOLID	1M	10%	1/2W	
R722	1-202-848-00	SOLID	680K		1/2W	
R724	1-202-838-00	SOLID	100K		1/2W	
R727	1-247-807-00	CARBON	100	5%	1/6W	
R728	1-247-807-00	CARBON	100	5%	1/6W	
R729	1-247-807-00	CARBON	100	5%	1/6W	

VARIABLE RESISTOR

RV701	1-230-105-00	RES, ADJ, CARBON 3.3K
RV702	1-230-103-00	RES, ADJ, CARBON 2.2K
RV703	1-230-104-00	RES, ADJ, CARBON 4.7K
RV704	1-230-103-00	RES, ADJ, CARBON 2.2K
RV705	1-230-104-00	RES, ADJ, CARBON 4.7K
RV706 ⚠	1-230-798-11	RES, ADJ, METAL GLAZE 90M
RV707	1-226-114-00	RES, ADJ, METAL GLAZE 2.2M
RV708	1-226-114-00	RES, ADJ, METAL GLAZE 2.2M
RV709	1-228-724-00	RES, ADJ, CERAMIC CARBON 10K

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*1-611-284-11 L BOARD
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*4-368-119-00 HOLDER, LED

DIODE

LED471	8-719-800-24	DIODE TLR147
LED472	8-719-812-41	DIODE TLR124

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*A-1355-081-A S1 BOARD, COMPLETE
****

*4-365-811-00 CASE (MAIN), SHIELD, VIF
*4-368-165-01 LID, UPPER, VIF SHIELD CASE
*4-368-166-01 LID, BOTTOM, VIF SHIELD CASE

CAPACITOR

C201	1-123-356-00	ELECT	10MF	20%	16V
C202	1-106-220-00	MYLAR	0.1MF	10%	100V
C203	1-106-216-00	MYLAR	0.068MF	10%	100V
C204	1-106-220-00	MYLAR	0.1MF	10%	100V
C205	1-123-356-00	ELECT	10MF	20%	16V
C206	1-123-332-00	ELECT	47MF	20%	16V
C207	1-106-216-00	MYLAR	0.068MF	10%	100V
C208	1-123-356-00	ELECT	10MF	20%	16V
C209	1-102-963-00	CERAMIC	33PF	5%	50V
C210	1-123-356-00	ELECT	10MF	20%	16V
C211	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C212	1-102-963-00	CERAMIC	33PF	5%	50V
C213	1-123-356-00	ELECT	10MF	20%	16V
C214	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C215	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C216	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C217	1-123-379-00	ELECT	0.47MF	20%	50V
C218	1-161-051-00	CERAMIC	0.01MF	10%	50V
C219	1-102-525-00	CERAMIC	68PF	5%	50V
C220	1-161-059-00	CERAMIC	0.047MF	10%	25V
C221	1-123-318-00	ELECT	33MF	20%	16V
C222	1-161-059-11	CERAMIC	0.047MF	10%	50V
C224	1-123-318-00	ELECT	33MF	20%	16V
C225	1-102-824-00	CERAMIC	470PF	5%	50V
C226	1-102-125-00	CERAMIC	0.0047MF	10%	50V

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Ref.No.	Part No.	Description				Remark
C227	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C228	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C229	1-102-513-00	CERAMIC	18PF	5%	50V	
C230	1-102-525-00	CERAMIC	68PF	5%	50V	
C231	1-121-705-00	ELECT	2.2MF	30%	25V	
C232	1-123-021-00	ELECT	0.47MF	30%	50V	
C233	1-108-587-00	MYLAR	0.022MF	10%	50V	
C234	1-123-380-00	ELECT	1MF	20%	50V	
C235	1-102-523-00	CERAMIC	56PF	5%	50V	
C236	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C237	1-102-822-00	CERAMIC	390PF	5%	50V	
C238	1-102-525-00	CERAMIC	68PF	5%	50V	
C239	1-102-513-00	CERAMIC	18PF	5%	50V	
C240	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C241	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C242	1-123-330-00	ELECT	22MF	20%	16V	
		FILTER				
CF201	1-404-134-00	TRAP, CERAMIC (5.5MHZ)				
CF202	1-527-263-00	CERAMIC FILTER (5.5MHZ)				
CF203	1-404-473-00	DISCRIMINATOR, CERAMIC				
		DIODE				
D201 ⚠	8-719-911-19	DIODE 1SS119				
		IC				
IC201	8-759-800-12	IC LA7920				
IC202	8-752-001-51	IC CX20015A				
		COIL				
L201	1-407-713-00	MICRO INDUCTOR 470UH				
L202	1-408-397-00	MICRO INDUCTOR 1UH				
L203	1-408-408-00	MICRO INDUCTOR 8.2UH				
L204	1-408-410-00	MICRO INDUCTOR 12UH				
L205	1-408-400-00	MICRO INDUCTOR 1.8UH				
L206	1-408-413-00	MICRO INDUCTOR 22UH				
L207	1-404-465-00	COIL, VIF (MOLD TYPE)				
L208	1-404-465-00	COIL, VIF (MOLD TYPE)				
L209	1-408-424-00	MICRO INDUCTOR 180UH				
L211	1-407-184-XX	MICRO INDUCTOR 3.3UH				
		TRANSISTOR				
Q201	8-729-245-83	TRANSISTOR 2SC2458				
Q202	8-765-300-00	TRANSISTOR 2SC2009				
Q203	8-729-204-83	TRANSISTOR 2SA1048GR				
Q204	8-729-245-83	TRANSISTOR 2SC2458				
		RESISTOR				
R201	1-249-421-11	CARBON	2.2K	5%	1/6W	
R202 ⚠	1-246-524-00	CARBON	130K	5%	1/4W	
R203	1-247-879-00	CARBON	100K	5%	1/6W	
R204	1-247-879-00	CARBON	100K	5%	1/6W	
R205	1-247-847-00	CARBON	4.7K	5%	1/6W	
R206	1-247-847-00	CARBON	4.7K	5%	1/6W	
R207	1-249-421-11	CARBON	2.2K	5%	1/6W	
R208	1-247-861-00	CARBON	18K	5%	1/6W	
R209	1-249-429-11	CARBON	10K	5%	1/6W	
R210	1-247-891-00	CARBON	330K	5%	1/6W	
R211	1-249-421-11	CARBON	2.2K	5%	1/6W	
R212	1-249-421-11	CARBON	2.2K	5%	1/6W	
R213	1-247-803-00	CARBON	68	5%	1/6W	
R214	1-247-833-00	CARBON	1.2K	5%	1/6W	
R215	1-247-845-00	CARBON	3.9K	5%	1/6W	
R216	1-247-813-00	CARBON	180	5%	1/6W	
R217	1-247-818-00	CARBON	300	5%	1/6W	
R218	1-247-807-00	CARBON	100	5%	1/6W	
R219	1-247-825-00	CARBON	560	5%	1/6W	
R220	1-247-822-00	CARBON	430	5%	1/6W	
R221	1-247-826-00	CARBON	620	5%	1/6W	
R222	1-247-843-00	CARBON	3.3K	5%	1/6W	
R223	1-247-847-00	CARBON	4.7K	5%	1/6W	
R224	1-247-879-00	CARBON	100K	5%	1/6W	
R225	1-247-815-00	CARBON	220	5%	1/6W	
R226	1-247-841-00	CARBON	2.7K	5%	1/6W	
R227	1-247-831-00	CARBON	1K	5%	1/6W	
R228	1-249-437-11	CARBON	47K	5%	1/6W	
R229	1-247-857-00	CARBON	12K	5%	1/6W	
R230	1-247-857-00	CARBON	12K	5%	1/6W	
R233	1-249-421-11	CARBON	2.2K	5%	1/6W	
R234	1-247-828-00	CARBON	750	5%	1/6W	
R235	1-247-831-00	CARBON	1K	5%	1/6W	
R236	1-247-829-00	CARBON	820	5%	1/6W	
R237	1-247-783-00	CARBON	10	5%	1/8W	F
R238	1-214-714-51	METAL	240	1%	1/4W	
R239	1-214-134-00	METAL	1.2K	1%	1/4W	
R243	1-247-825-00	CARBON	560	5%	1/6W	
		VARIABLE RESISTOR				
RV201	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K				
		CONNECTOR				
S1	*1-560-127-00	PLUG, CONNECTOR (2.5MM) 7P				
S2	*1-560-128-00	PLUG, CONNECTOR (2.5MM PITCH)				
		FILTER				
SF201 ⚠	1-404-433-00	SAWF				
	*4-336-029-00	PLATE, SHIELD; SF201				
		TRANSFORMER				
T201	1-404-465-00	COIL, VIF (MOLD TYPE)				
T204	1-404-465-00	COIL, VIF (MOLD TYPE)				
		TUNER				
TU201 ⚠	1-463-421-21	TUNER, ET (BT-883)				

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Z **N**

Ref.No.	Part No.	Description				Remark
	*1-611-285-11	Z BOARD *******				
	1-543-171-00	CORE, RING				
		JACK				
EJ901	1-507-864-00	JACK, EARPHONE				
	*1-606-794-11	N BOARD *******				
	*1-556-332-00	CONNECTOR ASSY (2.5MM) 3P				
	*4-342-117-00	CASE, SHIELD (MAIN), R				
	*4-342-118-00	LID, SHIELD CASE, R				
		CAPACITOR				
C1	1-123-617-00	ELECT	10MF	20%	16V	
C2	1-123-617-00	ELECT	10MF	20%	16V	
C3	1-123-617-00	ELECT	10MF	20%	16V	
C4	1-161-057-00	CERAMIC	0.033MF	10%	25V	
C5	1-106-184-00	MYLAR	0.0033MF	5%	50V	
C6	1-123-821-00	ELECT	47MF	20%	16V	
		DIODE				
D1	8-719-110-32	DIODE PH302B				
		IC				
IC1	8-759-102-84	IC UPC1373HA				
		COIL				
L1	1-404-310-00	COIL				
		MISCELLANEOUS *************				
	⚠1-451-230-00	DEFLECTION YOKE (SY-125)				
	1-452-032-00	MAGNET, DISK; 10MM ø				
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ø				
	1-452-277-00	MAGNET, BMC				
	1-501-152-00	ROD ANTENNA, TYPE B				
	⚠1-551-908-31	CORD, POWER, EULO PLUG				
	*1-556-565-21	CABLE (PAL.PIN)				
	⚠1-556-983-31	CONNECTOR, COAXIAL ANTENNA				
C905	1-161-491-00	CAP, CERAMIC 470PF				
L901	⚠1-426-145-00	COIL, DEGAUSSING				
L902	⚠1-426-145-00	COIL, DEGAUSSING				
S901	⚠1-554-966-11	SWITCH, PUSH (AC POWER)(1 KEY)				
SP901	1-503-239-00	SPEAKER				
V901	⚠8-735-550-05	CRT (A34JBU00X)				

ACCESSORIES AND PACKING MATERIALS
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Part No.	Description	Remark
A-1470-625-A	COMMANDER ASSY (RM-635)	
1-504-034-72	MAGNETIC EARPHONE ME-20	
4-314-534-00	BAG, PROTECTION	
4-368-140-00	CUSHION (UPPER) (ASSY)	
4-368-141-00	CUSHION (LOWER) (ASSY)	
4-372-440-01	INDIVIDUAL CARTON	
4-491-937-41	INSTRUCTION	
4-493-831-51	MANUAL, INSTRUCTION	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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